



#2

SEQUENCE LISTING

110> VOSSHALL, LESLIE
AMREIN, HUBERT
AXEL, RICHARD

<120> GENES ENCODING INSECT ODORANT RECEPTORS AND USES THEREOF

<130> 0575/58715-A-PCT-US/JPW/ADM/BJA

<140> US 09/932,227

<141> 2001-08-17

<150> PCT/US00/04995

<151> 2000-02-25

<160> 108

<170> PatentIn version 3.0

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<212> DNA

<213> DROSOPHILA MELANOGASTER DOR62

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 Ile Gln Asn Cys Ala Ser Asp Ser Tyr Pro Pro Ala Phe Leu Cys Leu
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 210 215 220
 Cys Arg Thr Glu Lys Ser Asn Lys Gly Gln Thr Tyr Glu Ala Trp Arg
 225 230 235 240
 Glu Glu Val Tyr Gln Glu Leu Ile Glu Cys Ile Arg Asp Leu Ala Arg
 245 250 255
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 260 265 270
 Met Ala Gln Phe Val Cys Ser Ala Ala Val Gln Cys Thr Val Ala Met
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 His Phe Leu Tyr Val Ala Asp Asp His Asp His Thr Ala Met Ile Ile
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 Tyr Phe Gly Asp Arg Met Arg Thr Gln Ser Glu Ala Leu Cys Asp Ala
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 340 345 350
 Leu Leu Phe Thr Leu Ala Arg Thr Gln Arg Pro Ser Leu Ile Tyr Ala
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<212> DNA

<213> DROSOPHILA MELANOGASTER DOR104

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 50 55 60
 Ala Tyr Cys Ser Met Val Ile Phe Thr Ser Leu His Leu Gly Val Leu
 65 70 75 80
 Phe Thr Lys Thr Thr Leu Asp Val Leu Pro Thr Gly Glu Leu Gln Ala
 85 90 95
 Ile Thr Asp Ala Leu Thr Met Thr Ile Ile Tyr Phe Phe Thr Gly Tyr
 100 105 110
 Gly Thr Ile Tyr Trp Cys Leu Arg Ser Arg Arg Leu Leu Ala Tyr Met
 115 120 125
 Glu His Met Asn Arg Glu Tyr Arg His His Ser Leu Ala Gly Val Thr
 130 135 140
 Phe Val Ser Ser His Ala Ala Phe Arg Met Ser Arg Asn Phe Thr Val
 145 150 155 160
 Val Trp Ile Met Ser Cys Leu Leu Gly Val Ile Ser Trp Gly Val Ser
 165 170 175
 Pro Leu Met Leu Gly Ile Arg Met Leu Pro Leu Gln Cys Trp Tyr Pro
 180 185 190
 Phe Asp Ala Leu Gly Pro Gly Thr Tyr Thr Ala Val Tyr Ala Thr Gln
 195 200 205
 Leu Phe Gly Gln Ile Met Val Gly Met Thr Phe Gly Phe Gly Gly Ser
 210 215 220
 Leu Phe Val Thr Leu Ser Leu Leu Leu Leu Gly Gln Phe Asp Val Leu
 225 230 235 240
 Tyr Cys Ser Leu Lys Asn Leu Asp Ala His Thr Lys Leu Leu Gly Gly
 245 250 255
 Glu Ser Val Asn Gly Leu Ser Ser Leu Gln Glu Glu Leu Leu Leu Gly
 260 265 270
 Asp Ser Lys Arg Glu Leu Asn Gln Tyr Val Leu Leu Gln Glu His Pro
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 Thr Asp Leu Leu Arg Leu Ser Ala Gly Arg Lys Cys Pro Asp Gln Gly
 290 295 300
 Asn Ala Phe His Asn Ala Leu Val Glu Cys Ile Arg Leu His Arg Phe

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 <211> 376
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR87

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		20					25						30		
Phe	Ala	Phe	Val	Leu	Pro	Val	Thr	Ala	Met	Asn	Leu	Met	Gln	Phe	Val
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 Ile Ile Lys Arg Arg Gln Phe Glu Glu Phe Leu Gly Gln Leu Ala Thr
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 Leu Phe His Ser Ile Leu Asp Ser Thr Asp Glu Trp Gly Arg Gly Ile
 100 105 110
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 115 120 125
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 130 135 140
 Arg Glu Glu Arg Ala His Pro Phe Gly Val Ala Leu Pro Gly Val Ser
 145 150 155 160
 Met Thr Ser Ser Pro Val Tyr Glu Val Ile Tyr Leu Ala Gln Leu Pro
 165 170 175
 Thr Pro Leu Leu Leu Ser Met Met Tyr Met Pro Phe Val Ser Leu Phe
 180 185 190
 Ala Gly Leu Ala Ile Phe Gly Lys Ala Met Leu Gln Ile Leu Val His
 195 200 205
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 225 230 235 240
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 245 250 255
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 260 265 270
 Ile Thr Ser Pro Thr Gln Val Ile Ser Ile Val Met Tyr Ile Leu Thr
 275 280 285
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 290 295 300
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 305 310 315 320
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1338

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 <211> 397
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Ser	Phe	Gly	Trp	Thr	Glu	Pro	Glu	Asn	Lys	Arg	Trp	Ile	Leu	Pro	Tyr
		35					40					45			
Lys	Leu	Trp	Leu	Ala	Phe	Val	Asn	Ile	Val	Met	Leu	Ile	Leu	Leu	Pro
	50					55					60				
Ile	Ser	Ile	Ser	Ile	Glu	Tyr	Leu	His	Arg	Phe	Lys	Thr	Phe	Ser	Ala
65					70					75					80
Gly	Glu	Phe	Leu	Ser	Ser	Leu	Glu	Ile	Gly	Val	Asn	Met	Tyr	Gly	Ser
			85						90					95	
Ser	Phe	Lys	Cys	Ala	Phe	Thr	Leu	Ile	Gly	Phe	Lys	Lys	Arg	Gln	Glu
			100					105						110	
Ala	Lys	Val	Leu	Leu	Asp	Gln	Leu	Asp	Lys	Arg	Cys	Leu	Ser	Asp	Lys
		115					120						125		
Glu	Arg	Ser	Thr	Val	His	Arg	Tyr	Val	Ala	Met	Gly	Asn	Phe	Phe	Asp
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 Ile Asp Asp Cys Gln Glu Met Ser Asn Cys Leu Phe Gln Ser Asp Trp
 325 330 335
 Thr Ser Ala Asp Arg Arg Tyr Lys Ser Thr Leu Val Tyr Phe Leu His
 340 345 350
 Asn Leu Gln Gln Pro Ile Thr Leu Thr Ala Gly Gly Val Phe Pro Ile
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20             25             30

Ser Phe Gly Trp Thr Val Pro Glu Asn Lys Arg Trp Asp Leu His Tyr
35             40             45

Lys Leu Trp Ser Thr Phe Val Thr Leu Val Ile Phe Ile Leu Leu Pro
50             55             60

Ile Ser Val Ser Val Glu Tyr Ile Gln Arg Phe Lys Thr Phe Ser Ala
65             70             75             80

Gly Glu Phe Leu Ser Ser Ile Gln Ile Gly Val Asn Met Tyr Gly Ser
85             90             95

Ser Phe Lys Ser Tyr Leu Thr Met Met Gly Tyr Lys Lys Arg Gln Glu
100            105            110

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Ala Lys Met Ser Leu Asp Glu Leu Asp Lys Arg Cys Val Cys Asp Glu
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 Glu Arg Thr Ile Val His Arg His Val Ala Leu Gly Asn Phe Cys Tyr
 130 135 140
 Ile Phe Tyr His Ile Ala Tyr Thr Ser Phe Leu Ile Ser Asn Phe Leu
 145 150 155 160
 Ser Phe Ile Met Lys Arg Ile His Ala Trp Arg Met Tyr Phe Pro Tyr
 165 170 175
 Val Asp Pro Glu Lys Gln Phe Tyr Ile Ser Ser Ile Ala Glu Val Ile
 180 185 190
 Leu Arg Gly Trp Ala Val Phe Met Asp Leu Cys Thr Asp Val Cys Pro
 195 200 205
 Leu Ile Ser Met Val Ile Ala Arg Cys His Ile Thr Leu Leu Lys Gln
 210 215 220
 Arg Leu Arg Asn Leu Arg Ser Glu Pro Gly Arg Thr Glu Asp Glu Tyr
 225 230 235 240
 Leu Lys Glu Leu Ala Asp Cys Val Arg Asp His Arg Leu Ile Leu Asp
 245 250 255
 Tyr Val Asp Ala Leu Arg Ser Val Phe Ser Gly Thr Ile Phe Val Gln
 260 265 270
 Phe Leu Leu Ile Gly Ile Val Leu Gly Leu Ser Met Ile Asn Ile Met
 275 280 285
 Phe Phe Ser Thr Leu Ser Thr Gly Val Ala Val Val Leu Phe Met Ser
 290 295 300
 Cys Val Ser Met Gln Thr Phe Pro Phe Cys Tyr Leu Cys Asn Met Ile
 305 310 315 320
 Met Asp Asp Cys Gln Glu Met Ala Asp Ser Leu Phe Gln Ser Asp Trp
 325 330 335
 Thr Ser Ala Asp Arg Arg Tyr Lys Ser Thr Leu Val Tyr Phe Leu His
 340 345 350
 Asn Leu Gln Gln Pro Ile Ile Leu Thr Ala Gly Gly Val Phe Pro Ile
 355 360 365
 Ser Met Gln Thr Asn Leu Asn Met Val Lys Leu Ala Phe Thr Val Val
 370 375 380
 Thr Ile Val Lys Gln Phe Asn Leu Ala Glu Lys Phe Gln
 385 390 395

<210> 11
 <211> 1308
 <212> DNA
 <213> DROSOPHILA MELANOGASTER DOR64

<400> 11
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 agttggtcga tgctattgtg catcttgggtg tacctgccga caccatgct actgagagga 180
 gtatacagtt tcgaggatcc ggtggaaaat aatttcagct tgagcctgac ggtcacatcg 240
 ctgtccaatc tcatgaagtt ctgcatgtac gtggcccaac taacaaagat ggtcgaggtc 300
 cagagtctta ttggtcagct ggatgcccg gtttctggcg agagccagtc tgagcgtcat 360
 agaaatatga ccgagcacct gctaaggatg tccaagctgt tccagatcac ctacgctgta 420
 gtcttcatca ttgctgcagt tcccttcggt ttcgaaactg agctaagctt acccatgccc 480
 atgtggtttc ccttcgactg gaagaactcg atggtgacct acatcggagc tctggttttc 540
 caggagattg gctatgtctt tcaaattatg caatgctttg cagctgactc gtttcccccg 600
 ctcgactgt acctgatctc cgagcaatgt caattgctga tcctgagaat ctctgaaatc 660
 ggatatgggtt acaagactct ggaggagaac gaacaggatc tggtaactg catcagggat 720
 caaacgcgc tgtatagatt actcgatgtg accaagagtc tcgtttcgta tcccattgatg 780
 gtgcagttta tggttattgg catcaacatc gccatcacc tatttgcct gatattttac 840
 gtggagacct tgtacgatcg catctattat ctttgccttc tcttgggcat caccgtgcag 900
 acatatccat tgtgctacta tggaacctg gtgcaggaga gttttgctga gcttactat 960
 gcggtattct gcagcaactg ggtggatcaa agtgccagct atcgtgggca catgctcatc 1020
 ctggcggagc gcactaacg gatgcagctt ctctcgccg gcaacctgggt gcccattcac 1080
 ctgagcacct acgtggcctg ttggaaggga gctactcct tcttcacct gatggccgat 1140
 cgagatggcc tgggttctta gtagccagc catttcactc acattctaca tcaagtagta 1200
 ctaccactga acacgaacac gaatatttca aaagtaaaca cataatatc acaatagtgt 1260
 atcacttta taaaattttt ggttaccatg aaaaaaaaa aaaaaaaaa 1308

<210> 12
 <211> 379
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR64

<400> 12

Met	Lys	Leu	Ser	Glu	Thr	Leu	Lys	Ile	Asp	Tyr	Phe	Arg	Val	Gln	Leu
1				5					10					15	
Asn	Ala	Trp	Arg	Ile	Cys	Gly	Ala	Leu	Asp	Leu	Ser	Glu	Gly	Arg	Tyr
			20					25					30		
Trp	Ser	Trp	Ser	Met	Leu	Leu	Cys	Ile	Leu	Val	Tyr	Leu	Pro	Thr	Pro
		35					40					45			
Met	Leu	Leu	Arg	Gly	Val	Tyr	Ser	Phe	Glu	Asp	Pro	Val	Glu	Asn	Asn
	50					55					60				
Phe	Ser	Leu	Ser	Leu	Thr	Val	Thr	Ser	Leu	Ser	Asn	Leu	Met	Lys	Phe
65					70					75					80
Cys	Met	Tyr	Val	Ala	Gln	Leu	Thr	Lys	Met	Val	Glu	Val	Gln	Ser	Leu
				85					90					95	
Ile	Gly	Gln	Leu	Asp	Ala	Arg	Val	Ser	Gly	Glu	Ser	Gln	Ser	Glu	Arg
			100					105					110		
His	Arg	Asn	Met	Thr	Glu	His	Leu	Leu	Arg	Met	Ser	Lys	Leu	Phe	Gln
		115					120					125			
Ile	Thr	Tyr	Ala	Val	Val	Phe	Ile	Ile	Ala	Ala	Val	Pro	Phe	Val	Phe
	130					135					140				
Glu	Thr	Glu	Leu	Ser	Leu	Pro	Met	Pro	Met	Trp	Phe	Pro	Phe	Asp	Trp
145					150					155					160
Lys	Asn	Ser	Met	Val	Ala	Tyr	Ile	Gly	Ala	Leu	Val	Phe	Gln	Glu	Ile
				165					170					175	
Gly	Tyr	Val	Phe	Gln	Ile	Met	Gln	Cys	Phe	Ala	Ala	Asp	Ser	Phe	Pro
			180					185					190		
Pro	Leu	Val	Leu	Tyr	Leu	Ile	Ser	Glu	Gln	Cys	Gln	Leu	Leu	Ile	Leu
		195					200					205			
Arg	Ile	Ser	Glu	Ile	Gly	Tyr	Gly	Tyr	Lys	Thr	Leu	Glu	Glu	Asn	Glu
	210					215					220				
Gln	Asp	Leu	Val	Asn	Cys	Ile	Arg	Asp	Gln	Asn	Ala	Leu	Tyr	Arg	Leu
225					230					235					240
Leu	Asp	Val	Thr	Lys	Ser	Leu	Val	Ser	Tyr	Pro	Met	Met	Val	Gln	Phe
				245					250					255	
Met	Val	Ile	Gly	Ile	Asn	Ile	Ala	Ile	Thr	Leu	Phe	Val	Leu	Ile	Phe
			260					265					270		
Tyr	Val	Glu	Thr	Leu	Tyr	Asp	Arg	Ile	Tyr	Tyr	Leu	Cys	Phe	Leu	Leu

275	280	285
Gly Ile Thr Val Gln Thr Tyr Pro Leu Cys Tyr Tyr Gly Thr Met Val		
290	295	300
Gln Glu Ser Phe Ala Glu Leu His Tyr Ala Val Phe Cys Ser Asn Trp		
305	310	315
Val Asp Gln Ser Ala Ser Tyr Arg Gly His Met Leu Ile Leu Ala Glu		
325	330	335
Arg Thr Lys Arg Met Gln Leu Leu Leu Ala Gly Asn Leu Val Pro Ile		
340	345	350
His Leu Ser Thr Tyr Val Ala Cys Trp Lys Gly Ala Tyr Ser Phe Phe		
355	360	365
Thr Leu Met Ala Asp Arg Asp Gly Leu Gly Ser		
370	375	

<210> 13

<211> 1152

<212> DNA

<213> DROSOPHILA MELANOGASTER DOR71g

<400> 13

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gtaccgactt tcttcaagga ttctcacgt cctgtccagc tgtacgtggg gttgctgcac	120
atcctgggtca ccttgggtt tccactgcat ctgctgctgc atcttctgct acttccatct	180
accgctgagt tctttaagaa cctgaccatg tctctgactt gtgtggcctg cagtctgaag	240
catgtggccc acttgatca ctgcccgcag attgtggaaa tcgaatcact gatcgagcaa	300
ttagacacat ttattgccag cgaacaggag catcggtact atcgggatca cgtacattgc	360
catgctaggc gctttacaag atgtctctat attagctttg gcatgatcta tgcgcttttc	420
ctgttcggcg tcttcgttca ggttattagc ggaaattggg aacttctcta tccagcctat	480
ttcccatctg acttggagag caatcgcttt ctggcgag tagccttggg ctatcaggta	540
ttcagcatgt tagttgaagg ctccagggg ctgggcaacg atacctatac cccactgacc	600
ctatgccttc tggccggaca tgctcatttg tggccatac gaatgggtca actgggatac	660
ttcgtatgacg agacggtggg gaatcatcag cgtttgctgg attacattga gcagcataaa	720
ctcttggtgc ggttccacaa cctgggtgagc cggaccatca gcgaagtga actgggtcag	780
ctgggaggat gtggagccac tctgtgcac attgtctcct acatgctctt ctttgtgggc	840
gacacaatct cgctggtcta ctacttggtg ttctttggag tggctctcgt gcagctcttt	900

cccagctgct attttgcag cgaagtagcc gaggagttgg aacggctgcc atatgcatc 960
 ttctccagca gatggtacga tcaatcgcg gatcatcgat tcgatttgct catctttaca 1020
 caattaacac tgggaaaccg ggggtggatc atcaaggcag gaggtcttat cgagctgaat 1080
 ttgaatgcct ttttcgccac cctgaagatg gcctattccc tttttgcagt tgtggtgcgg 1140
 gcaaagggta ta 1152

<210> 14
 <211> 390
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR71g

<400> 14

Met	Val	Ile	Ile	Asp	Ser	Leu	Ser	Phe	Tyr	Arg	Pro	Phe	Trp	Ile	Cys	1	5	10	15
Met	Arg	Leu	Leu	Val	Pro	Thr	Phe	Phe	Lys	Asp	Ser	Ser	Arg	Pro	Val	20	25	30	
Gln	Leu	Tyr	Val	Val	Leu	Leu	His	Ile	Leu	Val	Thr	Leu	Trp	Phe	Pro	35	40	45	
Leu	His	Leu	Leu	Leu	His	Leu	Leu	Leu	Pro	Ser	Thr	Ala	Glu	Phe	50	55	60		
Phe	Lys	Asn	Leu	Thr	Met	Ser	Leu	Thr	Cys	Val	Ala	Cys	Ser	Leu	Lys	65	70	75	
His	Val	Ala	His	Leu	Tyr	His	Leu	Pro	Gln	Ile	Val	Glu	Ile	Glu	Ser	85	90	95	
Leu	Ile	Glu	Gln	Leu	Asp	Thr	Phe	Ile	Ala	Ser	Glu	Gln	Glu	His	Arg	100	105	110	
Tyr	Tyr	Arg	Asp	His	Val	His	Cys	His	Ala	Arg	Arg	Phe	Thr	Arg	Cys	115	120	125	
Leu	Tyr	Ile	Ser	Phe	Gly	Met	Ile	Tyr	Ala	Leu	Phe	Leu	Phe	Gly	Val	130	135	140	
Phe	Val	Gln	Val	Ile	Ser	Gly	Asn	Trp	Glu	Leu	Leu	Tyr	Pro	Ala	Tyr	145	150	155	
Phe	Pro	Phe	Asp	Leu	Glu	Ser	Asn	Arg	Phe	Leu	Gly	Ala	Val	Ala	Leu	165	170	175	
Gly	Tyr	Gln	Val	Phe	Ser	Met	Leu	Val	Glu	Gly	Phe	Gln	Gly	Leu	Gly	180	185	190	

Asn Asp Thr Tyr Thr Pro Leu Thr Leu Cys Leu Leu Ala Gly His Val
 195 200 205
 His Leu Trp Ser Ile Arg Met Gly Gln Leu Gly Tyr Phe Asp Asp Glu
 210 215 220
 Thr Val Val Asn His Gln Arg Leu Leu Asp Tyr Ile Glu Gln His Lys
 225 230 235 240
 Leu Leu Val Arg Phe His Asn Leu Val Ser Arg Thr Ile Ser Glu Val
 245 250 255
 Gln Leu Val Gln Leu Gly Gly Cys Gly Ala Thr Leu Cys Ile Ile Val
 260 265 270
 Ser Tyr Met Leu Phe Phe Val Gly Asp Thr Ile Ser Leu Val Tyr Tyr
 275 280 285
 Leu Val Phe Phe Gly Val Val Cys Val Gln Leu Phe Pro Ser Cys Tyr
 290 295 300
 Phe Ala Ser Glu Val Ala Glu Glu Leu Glu Arg Leu Pro Tyr Ala Ile
 305 310 315 320
 Phe Ser Ser Arg Trp Tyr Asp Gln Ser Arg Asp His Arg Phe Asp Leu
 325 330 335
 Leu Ile Phe Thr Gln Leu Thr Leu Gly Asn Arg Gly Trp Ile Ile Lys
 340 345 350
 Ala Gly Gly Leu Ile Glu Leu Asn Leu Asn Ala Phe Phe Ala Thr Leu
 355 360 365
 Lys Met Ala Tyr Ser Leu Phe Ala Val Val His Arg Glu Thr Gly Asn
 370 375 380
 Pro Leu Gln Arg Glu His
 385 390

<210> 15
 <211> 1137
 <212> DNA
 <213> DROSOPHILA MELANOGASTER DOR72g

<400> 15
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 acaattttcg taaccatttg gtatccaatt cacctgattc tgggactggt tatggaaaga 180
 tctttggggg atgtctgcaa gggcttacca attacggcag catgcttttt cgccagcttt 240
 aaatttattt gttttcgctt caagctatct gaaattaaag aaatcgaaat attattttaa 300

gagctggatc agcgagcttt aagtcgagag gaatgcgagt ttttcaatca aaatacgaga 360
 cgtgaggcga atttcatttg gaaaagtttc attgtggcct atggactgtc gaatatctcg 420
 gctattgcat cagttctttt cggcgttgga cataagctat tatatcccg ctaggtttcca 480
 tacgatgtgc aggccacgga actaatattt tggctaagt taacatacca aattgccgga 540
 gtaagtttg ccatacttca gaatttggcc aatgattcct atccaccgat gacattttgc 600
 gtggttgccg gtcagtgaag acttttggcg atgcgcttga gtagaattgg ccaaggtcca 660
 gaggaacaa tatacttaac cggaagcaa ttaatcgaaa gcatcgagga tcaccgaaaa 720
 ctaatgaaga tagtggaatt actgcgcagc accatgaata ttctgcagct cgccagttt 780
 atttcaagt gtgttaatat ttccataaca ctagtcaaca ttctcttctt tgcggataat 840
 aatttcgcta taacctacta cggagtgtac ttccatcga tgggttgga attattcccg 900
 tgctgctatt acggcacct gatatccgtg gagatgaacc agctgaccta tgcgatttac 960
 tcaagtaact ggatgagtat gaatcggagc tacagccgca tcctactgat cttcatgcaa 1020
 ctcaccctgg cggaagtgca gatcaaggcc ggtgggatga ttggcatcgg aatgaacgcc 1080
 ttctttgcc cgtgcgatt ggctactcc ttcttactt tggccatgtc gctgcgt 1137

<210> 16
 <211> 379
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR72g

<400> 16

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Tyr	Trp	Leu	Tyr	Trp	His	Leu	Leu	Gly	Leu	Glu	Ser	Asn	Phe	Phe	Leu
		20						25					30		
Asn	Arg	Leu	Leu	Asp	Leu	Val	Ile	Thr	Ile	Phe	Val	Thr	Ile	Trp	Tyr
		35					40					45			
Pro	Ile	His	Leu	Ile	Leu	Gly	Leu	Phe	Met	Glu	Arg	Ser	Leu	Gly	Asp
	50					55					60				
Val	Cys	Lys	Gly	Leu	Pro	Ile	Thr	Ala	Ala	Cys	Phe	Phe	Ala	Ser	Phe
65					70					75					80
Lys	Phe	Ile	Cys	Phe	Arg	Phe	Lys	Leu	Ser	Glu	Ile	Lys	Glu	Ile	Glu
			85						90					95	
Ile	Leu	Phe	Lys	Glu	Leu	Asp	Gln	Arg	Ala	Leu	Ser	Arg	Glu	Glu	Cys

100										105					110				
Glu	Phe	Phe	Asn	Gln	Asn	Thr	Arg	Arg	Glu	Ala	Asn	Phe	Ile	Trp	Lys				
		115					120					125							
Ser	Phe	Ile	Val	Ala	Tyr	Gly	Leu	Ser	Asn	Ile	Ser	Ala	Ile	Ala	Ser				
	130					135					140								
Val	Leu	Phe	Gly	Gly	Gly	His	Lys	Leu	Leu	Tyr	Pro	Ala	Trp	Phe	Pro				
145					150					155					160				
Tyr	Asp	Val	Gln	Ala	Thr	Glu	Leu	Ile	Phe	Trp	Leu	Ser	Val	Thr	Tyr				
			165						170					175					
Gln	Ile	Ala	Gly	Val	Ser	Leu	Ala	Ile	Leu	Gln	Asn	Leu	Ala	Asn	Asp				
		180						185					190						
Ser	Tyr	Pro	Pro	Met	Thr	Phe	Cys	Val	Val	Ala	Gly	His	Val	Arg	Leu				
	195						200					205							
Leu	Ala	Met	Arg	Leu	Ser	Arg	Ile	Gly	Gln	Gly	Pro	Glu	Glu	Thr	Ile				
	210					215					220								
Tyr	Leu	Thr	Gly	Lys	Gln	Leu	Ile	Glu	Ser	Ile	Glu	Asp	His	Arg	Lys				
225					230					235					240				
Leu	Met	Lys	Ile	Val	Glu	Leu	Leu	Arg	Ser	Thr	Met	Asn	Ile	Ser	Gln				
			245						250					255					
Leu	Gly	Gln	Phe	Ile	Ser	Ser	Gly	Val	Asn	Ile	Ser	Ile	Thr	Leu	Val				
			260					265					270						
Asn	Ile	Leu	Phe	Phe	Ala	Asp	Asn	Asn	Phe	Ala	Ile	Thr	Tyr	Tyr	Gly				
		275					280					285							
Val	Tyr	Phe	Leu	Ser	Met	Val	Leu	Glu	Leu	Phe	Pro	Cys	Cys	Tyr	Tyr				
	290					295					300								
Gly	Thr	Leu	Ile	Ser	Val	Glu	Met	Asn	Gln	Leu	Thr	Tyr	Ala	Ile	Tyr				
305					310					315					320				
Ser	Ser	Asn	Trp	Met	Ser	Met	Asn	Arg	Ser	Tyr	Ser	Arg	Ile	Leu	Leu				
			325						330					335					
Ile	Phe	Met	Gln	Leu	Thr	Leu	Ala	Glu	Val	Gln	Ile	Lys	Ala	Gly	Gly				
		340						345					350						
Met	Ile	Gly	Ile	Gly	Met	Asn	Ala	Phe	Phe	Ala	Thr	Val	Arg	Leu	Ala				
	355						360					365							
Tyr	Ser	Phe	Phe	Thr	Leu	Ala	Met	Ser	Leu	Arg									
	370					375													

<210> 17
 <211> 1134

<212> DNA

<213> DROSOPHILA MELANOGASTER DOR73g

<400> 17

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tctttcatta cgattttatt tcccgatgcat cttatactgg gaatgtataa aaagccccag      180
attcaagtct tcaggagtct gcatttcaca tcggaatgcc ttttctgcag ctataagttt      240
ttctgttttc gttggaaact taaagaaata aagaccatcg aaggattgct ccaggatctc      300
gatagtcgag ttgaaagtga agaagaacgc aactacttta atcaaaatcc aagtcgtgtg      360
gctcgaatgc ttctgaaaag ttacttggtg gctgctatat cgcccataat cactgcaact      420
gtagctgggt tatttagtac tggtcgaaat ttaatgtatc tgggttggtt tccctacgat      480
tttcaagcaa ccgccgcaat ctattggatt agtttttcct atcaggcgat tggctctagt      540
ctgttgattc tggaaaaact ggccaacgat tcatatccgc cgattacatt ttgtgtggtc      600
tctggacatg tgagactatt gataatgcgt ttaagtcgaa ttggtcacga tgtaaaatta      660
tcaagttcgg aaaataccag aaaactcatc gaaggtatcc aggatcacag gaaactaatg      720
aagataatac gcctacttcg cagcacttta catcttagcc aactgggcc a gttcctttct      780
agtggaatca acatttccat aacactcatc aacatcctgt tctttgcgga aaacaacttt      840
gcaatgcttt attatcggtt gttctttgct gcaatgttaa tagaactatt tccaagttgt      900
tactatggaa ttctgatgac aatggagttt gataagctac catatgccat cttctccagc      960
aactggctta aaatggataa agataacaat cgatccttga taattctgat gcaactaaca     1020
ctggttccag tgaatataaa agcagggtgtt attgttggtc tcgatatgag tgcatttttt     1080
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<210> 18

<211> 378

<212> PRT

<213> Drosophila Melanogaster DOR73g

<400> 18

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Trp Leu Tyr Trp Arg Leu Leu Gly Val Glu Gly Asp Tyr Pro Phe Arg
          20          25          30
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Arg Leu Val Asp Phe Thr Ile Thr Ser Phe Ile Thr Ile Leu Phe Pro
 35 40 45
 Val His Leu Ile Leu Gly Met Tyr Lys Lys Pro Gln Ile Gln Val Phe
 50 55 60
 Arg Ser Leu His Phe Thr Ser Glu Cys Leu Phe Cys Ser Tyr Lys Phe
 65 70 75 80
 Phe Cys Phe Arg Trp Lys Leu Lys Glu Ile Lys Thr Ile Glu Gly Leu
 85 90 95
 Leu Gln Asp Leu Asp Ser Arg Val Glu Ser Glu Glu Glu Arg Asn Tyr
 100 105 110
 Phe Asn Gln Asn Pro Ser Arg Val Ala Arg Met Leu Ser Lys Ser Tyr
 115 120 125
 Leu Val Ala Ala Ile Ser Ala Ile Ile Thr Ala Thr Val Ala Gly Leu
 130 135 140
 Phe Ser Thr Gly Arg Asn Leu Met Tyr Leu Gly Trp Phe Pro Tyr Asp
 145 150 155 160
 Phe Gln Ala Thr Ala Ala Ile Tyr Trp Ile Ser Phe Ser Tyr Gln Ala
 165 170 175
 Ile Gly Ser Ser Leu Leu Ile Leu Glu Asn Leu Ala Asn Asp Ser Tyr
 180 185 190
 Pro Pro Ile Thr Phe Cys Val Val Ser Gly His Val Arg Leu Leu Ile
 195 200 205
 Met Arg Leu Ser Arg Ile Gly His Asp Val Lys Leu Ser Ser Ser Glu
 210 215 220
 Asn Thr Arg Lys Leu Ile Glu Gly Ile Gln Asp His Arg Lys Leu Met
 225 230 235 240
 Lys Ile Ile Arg Leu Leu Arg Ser Thr Leu His Leu Ser Gln Leu Gly
 245 250 255
 Gln Phe Leu Ser Ser Gly Ile Asn Ile Ser Ile Thr Leu Ile Asn Ile
 260 265 270
 Leu Phe Phe Ala Glu Asn Asn Phe Ala Met Leu Tyr Tyr Ala Val Phe
 275 280 285
 Phe Ala Ala Met Leu Ile Glu Leu Phe Pro Ser Cys Tyr Tyr Gly Ile
 290 295 300
 Leu Met Thr Met Glu Phe Asp Lys Leu Pro Tyr Ala Ile Phe Ser Ser
 305 310 315 320

Asn Trp Leu Lys Met Asp Lys Arg Tyr Asn Arg Ser Leu Ile Ile Leu
 325 330 335

Met Gln Leu Thr Leu Val Pro Val Asn Ile Lys Ala Gly Gly Ile Val
 340 345 350

Gly Ile Asp Met Ser Ala Phe Phe Ala Thr Val Arg Met Ala Tyr Ser
 355 360 365

Phe Tyr Thr Leu Ala Leu Ser Phe Arg Val
 370 375

<210> 19

<211> 1191

<212> DNA

<213> DROSOPHILA MELANOGASTER DOR46

<400> 19

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attgtgtcga atcttctcgt gaccctgtgc taccctgttc acctgggaat atccctcttt      180
cgcaaccgca ccatcaccga ggacatcctc aacctgacca cctttgcgac ctgcacagcc      240
tgttcgggtga agtgcctgct ctacgcctac aacatcaagg atgtgctgga gatggagcgg      300
ctgttgaggc ttttgatga acgcgtcgtg ggtccggagc aacgcagcat ctacggacaa      360
gtgaggggtcc agctgcgaaa tgtgtctatac gtgttcatcg gcatctacat gccgtgtgcc      420
ctgttcgccg agctatcctt tctgttcaag gaggagcgcg gtctgatgta tcccgcctgg      480
tttcccttcg actggctgca ctccaccagg aactattaca tagcgaacgc ctatcagata      540
gtgggcatct cgtttcagct gctgcaaaac tatgttagcg actgctttcc ggcggtgggtg      600
ctgtgcctga tctcatccca catcaaaatg ttgtacaaca gattcgagga ggtgggcctg      660
gatccagcca gagatgcgga gaaggacctg gaggcctgca tcaccgatca caagcatatt      720
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ctattccgac gcacgaggc cttcatttcc ctgcccctgc taattcagtt cacagtgacc      840
gccttgaatg tgtgcatcgg tttagcagcc ctggtgtttt tcgtcagcga gcccatggca      900
cggtatgtact tcatcttcta ctccctggcc atgccgctgc agatctttcc gtctgtcttt      960
ttcggcacccg acaacagagta ctggttcgga cgcctccact acgcggcctt cagttgcaat     1020
tggcacacac agaacaggag cttaagcgg aaaatgatgc tggtcgttga gcaatcgttg     1080
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1191

<210> 20
 <211> 379
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR46

<400> 20

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Thr	Ala	Trp	Arg	Tyr	Leu	Gly	Val	Ala	His	Phe	Arg	Val	Glu	Asn	Trp
			20					25					30		
Lys	Asn	Leu	Tyr	Val	Phe	Tyr	Ser	Ile	Val	Ser	Asn	Leu	Leu	Val	Thr
		35					40					45			
Leu	Cys	Tyr	Pro	Val	His	Leu	Gly	Ile	Ser	Leu	Phe	Arg	Asn	Arg	Thr
	50						55				60				
Ile	Thr	Glu	Asp	Ile	Leu	Asn	Leu	Thr	Thr	Phe	Ala	Thr	Cys	Thr	Ala
65					70					75					80
Cys	Ser	Val	Lys	Cys	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Lys	Asp	Val	Leu
				85					90					95	
Glu	Met	Glu	Arg	Leu	Leu	Arg	Leu	Leu	Asp	Glu	Arg	Val	Val	Gly	Pro
			100					105					110		
Glu	Gln	Arg	Ser	Ile	Tyr	Gly	Gln	Val	Arg	Val	Gln	Leu	Arg	Asn	Val
		115					120					125			
Leu	Tyr	Val	Phe	Ile	Gly	Ile	Tyr	Met	Pro	Cys	Ala	Leu	Phe	Ala	Glu
	130					135						140			
Leu	Ser	Phe	Leu	Phe	Lys	Glu	Glu	Arg	Gly	Leu	Met	Tyr	Pro	Ala	Trp
145					150					155					160
Phe	Pro	Phe	Asp	Trp	Leu	His	Ser	Thr	Arg	Asn	Tyr	Tyr	Ile	Ala	Asn
				165					170					175	
Ala	Tyr	Gln	Ile	Val	Gly	Ile	Ser	Phe	Gln	Leu	Leu	Gln	Asn	Tyr	Val
		180						185					190		
Ser	Asp	Cys	Phe	Pro	Ala	Val	Val	Leu	Cys	Leu	Ile	Ser	Ser	His	Ile
		195					200					205			
Lys	Met	Leu	Tyr	Asn	Arg	Phe	Glu	Glu	Val	Gly	Leu	Asp	Pro	Ala	Arg
	210				215						220				
Asp	Ala	Glu	Lys	Asp	Leu	Glu	Ala	Cys	Ile	Thr	Asp	His	Lys	His	Ile
225					230					235					240

Leu Glu Leu Phe Arg Arg Ile Glu Ala Phe Ile Ser Leu Pro Met Leu
 245 250 255
 Ile Gln Phe Thr Val Thr Ala Leu Asn Val Cys Ile Gly Leu Ala Ala
 260 265 270
 Leu Val Phe Phe Val Ser Glu Pro Met Ala Arg Met Tyr Phe Ile Phe
 275 280 285
 Tyr Ser Leu Ala Met Pro Leu Gln Ile Phe Pro Ser Cys Phe Phe Gly
 290 295 300
 Thr Asp Asn Glu Tyr Trp Phe Gly Arg Leu His Tyr Ala Ala Phe Ser
 305 310 315 320
 Cys Asn Trp His Thr Gln Asn Arg Ser Phe Lys Arg Lys Met Met Leu
 325 330 335
 Phe Val Glu Gln Ser Leu Lys Lys Ser Thr Ala Val Ala Gly Gly Met
 340 345 350
 Met Arg Ile His Leu Asp Thr Phe Phe Ser Thr Leu Lys Gly Ala Tyr
 355 360 365
 Ser Leu Phe Thr Ile Ile Ile Arg Met Arg Lys
 370 375

<210> 21

<211> 1290

<212> DNA

<213> DROSOPHILA MELANOGASTER DOR19g

<400> 21

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atcctgggtca tcctgttcat catgctgctg cttttctcct tcgaaatggt gaacaacatt	180
tcccaagtta gggagatcct aaaggtattc ttcatgttcg ccacggaaat atcctgcatg	240
gccaaattat tgcatttgaa gttgaagagc cgcaaaactcg ctggccttgg tgatgcatg	300
ttgtcccccag agttcggcgt taaaagtga caggaaatgc agatgctgga attggataga	360
gtggcggttg tccgcatgag gaactcctac ggcacatcatg ccttggggcg ggcttccctg	420
atccttatag ttccctgttt cgacaacttt ggcgagctac cactggccat gttggaggta	480
tgcagcatcg agggatggat ctgctattgg tcgcagtacc ttttccactc gatttgctg	540
ctgcccactt gtgtgctgaa tataacctac gactcggtgg cctactcggt gctctgtttc	600
ttgaagggtc agctacaaat gctggtcctg cgattagaaa agttgggtcc tgtgatcgaa	660

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ccccaggata atgagaaaat cgcaatggaa ctgctgtgagt gtgccgccta ctacaacagg      720
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agcttgaggg cctttggttc tgtagggcag cagaaattcc tttatatatc atttattact     1140
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gcgcgtcaac agttaaattt cgaaacaccg cagcacctaa agattttcaa gccgattttt     1260
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<210> 22
<211> 430
<212> PRT
<213> DROSOPHILA MELANOGASTER DOR19g

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<400> 22

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20        25        30
Phe Gln Ser Met Arg Phe Gly Phe Ile Leu Val Ile Leu Phe Ile Met
35        40        45
Leu Leu Leu Phe Ser Phe Glu Met Leu Asn Asn Ile Ser Gln Val Arg
50        55        60
Glu Ile Leu Lys Val Phe Phe Met Phe Ala Thr Glu Ile Ser Cys Met
65        70        75        80
Ala Lys Leu Leu His Leu Lys Leu Lys Ser Arg Lys Leu Ala Gly Leu
85        90        95
Val Asp Ala Met Leu Ser Pro Glu Phe Gly Val Lys Ser Glu Gln Glu
100       105       110
Met Gln Met Leu Glu Leu Asp Arg Val Ala Val Val Arg Met Arg Asn
115       120       125

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Ser Tyr Gly Ile Met Ser Leu Gly Ala Ala Ser Leu Ile Leu Ile Val
 130 135 140
 Pro Cys Phe Asp Asn Phe Gly Glu Leu Pro Leu Ala Met Leu Glu Val
 145 150 155 160
 Cys Ser Ile Glu Gly Trp Ile Cys Tyr Trp Ser Gln Tyr Leu Phe His
 165 170 175
 Ser Ile Cys Leu Leu Pro Thr Cys Val Leu Asn Ile Thr Tyr Asp Ser
 180 185 190
 Val Ala Tyr Ser Leu Leu Cys Phe Leu Lys Val Gln Leu Gln Met Leu
 195 200 205
 Val Leu Arg Leu Glu Lys Leu Gly Pro Val Ile Glu Pro Gln Asp Asn
 210 215 220
 Glu Lys Ile Ala Met Glu Leu Arg Glu Cys Ala Ala Tyr Tyr Asn Arg
 225 230 235 240
 Ile Val Arg Phe Lys Asp Leu Val Glu Leu Phe Ile Lys Gly Pro Gly
 245 250 255
 Ser Val Gln Leu Met Cys Ser Val Leu Val Leu Val Ser Asn Leu Tyr
 260 265 270
 Asp Met Ser Thr Met Ser Ile Ala Asn Gly Asp Ala Ile Phe Met Leu
 275 280 285
 Lys Thr Cys Ile Tyr Gln Leu Val Met Leu Trp Gln Ile Phe Ile Ile
 290 295 300
 Cys Tyr Ala Ser Asn Glu Val Thr Val Gln Ser Ser Arg Leu Cys His
 305 310 315 320
 Ser Ile Tyr Ser Ser Gln Trp Thr Gly Trp Asn Arg Ala Asn Arg Arg
 325 330 335
 Ile Val Leu Leu Met Met Gln Arg Phe Asn Ser Pro Met Leu Leu Ser
 340 345 350
 Thr Phe Asn Pro Thr Phe Ala Phe Ser Leu Glu Ala Phe Gly Ser Val
 355 360 365
 Gly Gln Gln Lys Phe Leu Tyr Ile Ser Phe Ile Thr Gly Tyr Ala Leu
 370 375 380
 Leu Leu Ser Asp Arg Gln Leu Leu Leu Gln Leu Leu Arg Thr Ala Glu
 385 390 395 400
 Ala Arg Gln Gln Leu Asn Phe Glu Thr Pro Gln His Leu Lys Ile Phe
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<210> 23

<211> 1391

<212> DNA

<213> DROSOPHILA MELANOGASTER DOR24

<400> 23

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aatgtgttta gcatagctgc cttttttccc tttatcctgg cagctgtgct ccataattgg      180
aagaatgtat tgctgctggc cgatgccatg gtggccctac taataacccat tctgggccta      240
ttcaagttta gcatgatact ttacttacgt cgcgatttca agcgactgat tgacaaattt      300
cgtttgctca tgtcgaatga ggcggaacag ggcgaggaat acgccgagat tctcaacgca      360
gcaaacaagc aggatcaacg aatgtgcact ctgttttagga cttgtttcct cctcgccctgg      420
gccttgaata gtgttctgcc cctcgtgaga atgggtctca gctattgggt agcagggtcat      480
gcagagcccc agttgccttt tccctgtctt ttcccttgga atatccacat cattcgcaat      540
tatgttttga gtttcatctg gagcgctttc gcctcgacag gtgtgggttt acctgctgtc      600
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aaaaaaaaa a                                     1391

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<400> 24

29

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Gly Tyr Leu Phe Ser Ile Thr Phe Ala Gln Thr Glu Gly Val Tyr Tyr 275 280 285		
Ala Ser Phe Ile Ala Thr Ile Ile Ile Gln Ala Tyr Ile Tyr Cys Tyr 290 295 300		
Cys Gly Glu Asn Leu Lys Thr Glu Ser Ala Ser Phe Glu Trp Ala Ile 305 310 315 320		
Tyr Asp Ser Pro Trp His Glu Ser Leu Gly Ala Gly Gly Ala Ser Thr 325 330 335		
Ser Ile Cys Arg Ser Leu Leu Ile Ser Met Met Arg Ala His Arg Gly 340 345 350		
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Ser
385

<210> 25
 <211> 900
 <212> DNA
 <213> Drosophila Melanogaster DOR10

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tacttcgttt tgtgcacgat cagcaacttt tacgaggcct ccatggtgac gacaaggata	180
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tacgagggtga ataaatacta cctatcctgt tccacgcgca atgttttgta cgtgtactac	420
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aactatgttt ttggactctt attggcatct aatctgttta ccacatcctg tttactttgc 720
tgcattggcgt actataccgt cgtcgaaggt ttcaattggg agggcatttc ctatatgatg 780
ctctttgcta gtgtagctgc ccagttctac gttgtcagct cacacggaca aatgttaata 840
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<210> 26
<211> 300
<212> PRT
<213> *Drosophila Melanogaster* DOR10

<400> 26

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			20				25						30		
Trp	Arg	Tyr	Leu	Leu	Val	Arg	Gly	Tyr	Phe	Val	Leu	Cys	Thr	Ile	Ser
			35				40					45			
Asn	Phe	Tyr	Glu	Ala	Ser	Met	Val	Thr	Thr	Arg	Ile	Ile	Glu	Trp	Glu
			50			55					60				
Ser	Leu	Ala	Gly	Ser	Pro	Ser	Lys	Ile	Met	Arg	Gln	Gly	Leu	His	Phe
65					70				75					80	
Phe	Tyr	Met	Leu	Ser	Ser	Gln	Leu	Lys	Phe	Ile	Thr	Phe	Met	Ile	Asn
			85					90						95	
Arg	Lys	Arg	Leu	Leu	Gln	Leu	Ser	His	Arg	Leu	Lys	Glu	Leu	Tyr	Pro
			100					105					110		
His	Lys	Glu	Gln	Asn	Gln	Arg	Lys	Tyr	Glu	Val	Asn	Lys	Tyr	Tyr	Leu
			115				120					125			
Ser	Cys	Ser	Thr	Arg	Asn	Val	Leu	Tyr	Val	Tyr	Tyr	Phe	Val	Met	Val
	130					135					140				
Val	Met	Ala	Leu	Glu	Pro	Leu	Val	Gln	Ser	Gln	Phe	Ile	Val	Asn	Val
145					150					155				160	
Ser	Leu	Gly	Thr	Asp	Leu	Trp	Met	Met	Cys	Val	Ser	Ser	Gln	Ile	Ser
			165					170						175	
Met	His	Leu	Gly	Tyr	Leu	Ala	Asn	Met	Leu	Ala	Ser	Ile	Arg	Pro	Ser
			180					185					190		
Pro	Glu	Thr	Glu	Gln	Gln	Asp	Cys	Asp	Phe	Leu	Ala	Ser	Ile	Ile	Lys

195		200		205
Arg His Gln Leu Met Ile	Arg Leu Gln Lys Asp Val Asn Tyr Val Phe			
210	215	220		
Gly Leu Leu Leu Ala Ser Asn Leu Phe Thr Thr Ser Cys Leu Leu Cys				
225	230	235		240
Cys Met Ala Tyr Tyr Thr Val Val Glu Gly Phe Asn Trp Glu Gly Ile				
	245	250		255
Ser Tyr Met Met Leu Phe Ala Ser Val Ala Ala Gln Phe Tyr Val Val				
	260	265		270
Ser Ser His Gly Gln Met Leu Ile Asp Leu Leu Met Thr Ile Thr Tyr				
	275	280		285
Arg Phe Phe Ala Val Ile Arg Gln Thr Val Glu Lys				
	290	295		300

<210> 27

<211> 1125

<212> DNA

<213> Drosophila Melanogaster DOR105

<400> 27

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acccaaatcg tctacatgat gagtaccaat gaaggactaa ccgggataat tcgtaactca	180
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gacagatatt tggctttgat ccaaaaaacta actgaggcct attacgattt actgaatctg	300
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tacattccgt acaccagtct gattgtgggc ttgataatgt tcggcattgt gaggtgcaag	600
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<210> 28
 <211> 375
 <212> PRT
 <213> Drosophila Melanogaster DOR105

<400> 28

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Phe	Trp	Ala	Leu	Leu	Tyr	Asp	Lys	Asn	Leu	Arg	Arg	Tyr	Val	Cys	Ile	20	25	30	
Gly	Leu	Ala	Ser	Phe	His	Ile	Phe	Thr	Gln	Ile	Val	Tyr	Met	Met	Ser	35	40	45	
Thr	Asn	Glu	Gly	Leu	Thr	Gly	Ile	Ile	Arg	Asn	Ser	Tyr	Met	Leu	Val	50	55	60	
Leu	Trp	Ile	Asn	Thr	Val	Leu	Arg	Ala	Tyr	Leu	Leu	Leu	Ala	Asp	His	65	70	75	80
Asp	Arg	Tyr	Leu	Ala	Leu	Ile	Gln	Lys	Leu	Thr	Glu	Ala	Tyr	Tyr	Asp	85	90	95	
Leu	Leu	Asn	Leu	Asn	Asp	Ser	Tyr	Ile	Ser	Glu	Ile	Leu	Asp	Gln	Val	100	105	110	
Asn	Lys	Val	Gly	Lys	Leu	Met	Ala	Arg	Gly	Asn	Leu	Phe	Phe	Gly	Met	115	120	125	
Leu	Thr	Ser	Met	Gly	Phe	Gly	Leu	Tyr	Pro	Leu	Ser	Ser	Ser	Glu	Arg	130	135	140	
Val	Leu	Pro	Phe	Gly	Ser	Lys	Ile	Pro	Gly	Leu	Asn	Glu	Tyr	Glu	Ser	145	150	155	160
Pro	Tyr	Tyr	Glu	Met	Trp	Tyr	Ile	Phe	Gln	Met	Leu	Ile	Thr	Pro	Met	165	170	175	
Gly	Cys	Cys	Met	Tyr	Ile	Pro	Tyr	Thr	Ser	Leu	Ile	Val	Gly	Leu	Ile	180	185	190	
Met	Phe	Gly	Ile	Val	Arg	Cys	Lys	Ala	Leu	Gln	His	Arg	Leu	Arg	Gln	195	200	205	

Val Ala Leu Lys His Pro Tyr Gly Asp Arg Asp Pro Arg Glu Leu Arg
 210 215 220
 Glu Glu Ile Ile Ala Cys Ile Arg Tyr Gln Gln Ser Ile Ile Glu Tyr
 225 230 235 240
 Met Asp His Ile Asn Glu Leu Thr Thr Met Met Phe Leu Phe Glu Leu
 245 250 255
 Met Ala Phe Ser Ala Leu Leu Cys Ala Leu Leu Phe Met Leu Ile Ile
 260 265 270
 Val Ser Gly Thr Ser Gln Leu Ile Ile Val Cys Met Tyr Ile Asn Met
 275 280 285
 Ile Leu Ala Gln Ile Leu Ala Leu Tyr Trp Tyr Ala Asn Glu Leu Arg
 290 295 300
 Glu Gln Asn Leu Ala Val Ala Thr Ala Ala Tyr Glu Thr Glu Trp Phe
 305 310 315 320
 Thr Phe Asp Val Pro Leu Arg Lys Asn Ile Leu Phe Met Met Met Arg
 325 330 335
 Ala Gln Arg Pro Ala Ala Ile Leu Leu Gly Asn Ile Arg Pro Ile Thr
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<210> 29

<211> 1188

<212> DNA

<213> Drosophila Melanogaster DOR107

<400> 29

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 aacatcatcc gttacgtggt gtacaccttc acggtttcct cggccatctt cctctattgc 960
 tacggaggca cagaaatgtc aactgagagc ctttccttgg gagaagcagc ctacacgagt 1020
 gcctgggata cttgggatcg agagaccgc aggcgggtct ttctcattat cctgcgtgct 1080
 caacgaccca ttacggtgag ggtgcccttt ttgacacat cgttaccagt cttcacatcg 1140
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<210> 30
 <211> 396
 <212> PRT
 <213> Drosophila Melanogaster DOR107

<400> 30

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			20					25					30		
Lys	Glu	Gln	Ser	Trp	Leu	His	Leu	Leu	Trp	Leu	Val	Phe	Asn	Phe	Val
		35					40					45			
Asn	Leu	Ala	His	Cys	Cys	Gln	Ala	Glu	Phe	Val	Phe	Gly	Trp	Ser	His
	50					55					60				
Leu	Arg	Thr	Ser	Pro	Val	Asp	Ala	Met	Asp	Ala	Phe	Cys	Pro	Leu	Ala
65					70				75					80	
Cys	Ser	Phe	Thr	Thr	Leu	Phe	Lys	Leu	Gly	Trp	Met	Trp	Trp	Arg	Arg
			85						90					95	
Gln	Glu	Val	Ala	Asp	Leu	Met	Asp	Arg	Ile	Arg	Leu	Leu	Ile	Gly	Glu
		100						105					110		
Gln	Glu	Lys	Arg	Glu	Asp	Ser	Arg	Arg	Lys	Val	Ala	Gln	Arg	Ser	Tyr

115					120					125						
Tyr	Leu	Met	Val	Thr	Arg	Cys	Gly	Met	Leu	Val	Phe	Thr	Leu	Gly	Ser	
130					135					140						
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145					150					155					160	
Arg	Arg	His	Gln	Glu	Phe	Lys	Phe	Asp	Met	Pro	Phe	Arg	Met	Leu	Phe	
165					170					175						
His	Asp	Phe	Ala	His	Arg	Met	Pro	Trp	Phe	Pro	Val	Phe	Tyr	Leu	Tyr	
180					185					190						
Ser	Thr	Trp	Ser	Gly	Gln	Val	Thr	Val	Tyr	Ala	Phe	Ala	Gly	Thr	Asp	
195					200					205						
Gly	Phe	Phe	Phe	Gly	Phe	Thr	Leu	Tyr	Met	Ala	Phe	Leu	Leu	Gln	Ala	
210					215					220						
Leu	Arg	Tyr	Asp	Ile	Gln	Asp	Ala	Leu	Lys	Pro	Ile	Arg	Asp	Pro	Ser	
225					230					235					240	
Leu	Arg	Glu	Ser	Lys	Ile	Cys	Cys	Gln	Arg	Leu	Ala	Asp	Ile	Val	Asp	
245					250					255						
Arg	His	Asn	Glu	Ile	Glu	Lys	Ile	Val	Lys	Glu	Phe	Ser	Gly	Ile	Met	
260					265					270						
Ala	Ala	Pro	Thr	Phe	Val	His	Phe	Val	Ser	Ala	Ser	Leu	Val	Ile	Ala	
275					280					285						
Thr	Ser	Val	Ile	Asp	Ile	Leu	Leu	Tyr	Ser	Gly	Tyr	Asn	Ile	Ile	Arg	
290					295					300						
Tyr	Val	Val	Tyr	Thr	Phe	Thr	Val	Ser	Ser	Ala	Ile	Phe	Leu	Tyr	Cys	
305					310					315					320	
Tyr	Gly	Gly	Thr	Glu	Met	Ser	Thr	Glu	Ser	Leu	Ser	Leu	Gly	Glu	Ala	
325					330					335						
Ala	Tyr	Ser	Ser	Ala	Trp	Tyr	Thr	Trp	Asp	Arg	Glu	Thr	Arg	Arg	Arg	
340					345					350						
Val	Phe	Leu	Ile	Ile	Leu	Arg	Ala	Gln	Arg	Pro	Ile	Thr	Val	Arg	Val	
355					360					365						
Pro	Phe	Phe	Ala	Pro	Ser	Leu	Pro	Val	Phe	Thr	Ser	Val	Ile	Lys	Phe	
370					375					380						
Thr	Gly	Ser	Ile	Val	Ala	Leu	Ala	Lys	Thr	Ile	Leu					
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<210> 31																
<211> 1161																

<212> DNA

<213> Drosophila Melanogaster DOR108

<400> 31

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aagcgcaact atcgcttcct gctccatctg cccattacct tcacctttat tggactcatg      180
tggctggagg ccttcatctc gagcaatctg gagcaggctg gccaggttct gtacatgtcc      240
atcaccgaga tggcttttgg ggtgaaaatc ctgagcattt ggcaactatcg caccgaagct      300
tggcggctga tgtacgaact ccaacatgct cgggactacc aactccacaa ccaggaggag      360
gtagactttt ggcgcgggga gcaacgattc ttcaagtggg tctttctacat ctacattctg      420
attagcttgg gcgtgggtata tagtggctgc actggagtac tttttctgga gggctacgaa      480
ctgccctttg cctactacgt gcccttcgaa tggcagaacg agagaaggta ctggttcgcc      540
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cagctgacca acgaggttta ccataccaat tggctggaat gtcggccacc gattcgaaag     1020
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<210> 32

<211> 387

<212> PRT

<213> Drosophila Melanogaster DOR108

<400> 32

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 Glu Trp Thr Phe Thr Gly Phe Val Lys Arg Asn Tyr Arg Phe Leu Leu
 35 40 45
 His Leu Pro Ile Thr Phe Thr Phe Ile Gly Leu Met Trp Leu Glu Ala
 50 55 60
 Phe Ile Ser Ser Asn Leu Glu Gln Ala Gly Gln Val Leu Tyr Met Ser
 65 70 75 80
 Ile Thr Glu Met Ala Leu Val Val Lys Ile Leu Ser Ile Trp His Tyr
 85 90 95
 Arg Thr Glu Ala Trp Arg Leu Met Tyr Glu Leu Gln His Ala Pro Asp
 100 105 110
 Tyr Gln Leu His Asn Gln Glu Glu Val Asp Phe Trp Arg Arg Glu Gln
 115 120 125
 Arg Phe Phe Lys Trp Phe Phe Tyr Ile Tyr Ile Leu Ile Ser Leu Gly
 130 135 140
 Val Val Tyr Ser Gly Cys Thr Gly Val Leu Phe Leu Glu Gly Tyr Glu
 145 150 155 160
 Leu Pro Phe Ala Tyr Tyr Val Pro Phe Glu Trp Gln Asn Glu Arg Arg
 165 170 175
 Tyr Trp Phe Ala Tyr Gly Tyr Asp Met Ala Gly Met Thr Leu Thr Cys
 180 185 190
 Ile Ser Asn Ile Thr Leu Asp Thr Leu Gly Cys Tyr Phe Leu Phe His
 195 200 205
 Ile Ser Leu Leu Tyr Arg Leu Leu Gly Leu Arg Leu Arg Glu Thr Lys
 210 215 220
 Asn Met Lys Asn Asp Thr Ile Phe Gly Gln Gln Leu Arg Ala Ile Phe
 225 230 235 240
 Ile Met His Gln Arg Ile Arg Ser Leu Thr Leu Thr Cys Gln Arg Ile
 245 250 255
 Val Ser Pro Tyr Ile Leu Ser Gln Ile Ile Leu Ser Ala Leu Ile Ile
 260 265 270
 Cys Phe Ser Gly Tyr Arg Leu Gln His Val Gly Ile Arg Asp Asn Pro
 275 280 285
 Gly Gln Phe Ile Ser Met Leu Gln Phe Val Ser Val Met Ile Leu Gln
 290 295 300
 Ile Tyr Leu Pro Cys Tyr Tyr Gly Asn Glu Ile Thr Val Tyr Ala Asn

305		310		315		320
Gln Leu Thr Asn Glu Val Tyr His Thr Asn Trp Leu Glu Cys Arg Pro						
	325			330		335
Pro Ile Arg Lys Leu Leu Asn Ala Tyr Met Glu His Leu Lys Lys Pro						
	340			345		350
Val Thr Ile Arg Ala Gly Asn Ser Phe Ala Val Gly Leu Pro Ile Phe						
	355			360		365
Val Lys Thr Ile Asn Asn Ala Tyr Ser Phe Leu Ala Leu Leu Leu Asn						
	370			375		380
Val Ser Asn						
385						

<210> 33
 <211> 1149
 <212> DNA
 <213> Drosophila Melanogaster DOR109

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tatccttttg tactgcacct tccactgacc ttcacgtata ttgccttaat gtggtatgaa	180
gctattacat cgtcagattt tgaggaagct ggtcaagttc tgtacatgtc catcaccgaa	240
ctggcattgg tcaactaaact gctgaatatt tggatcgtc gtcacgaagc tgctagtcta	300
atccacgaat tgcaacacga tcccgcattt aatctgcgca attcggagga aatcaaattc	360
tggcagcaaa atcagaggaa cttaaagaga atattttact ggtacatctg gggcagcctt	420
ttcgtggctg taatgggtta tataagcgtg tttttccagg aggattacga gctgcccttt	480
ggctactacg tgccattcga gtggcgacac agggaaacgat acttctacgc ttggggctat	540
aatgtgggtg ccatgaccct gtgctgtcta tccaacatcc tactggacac actaggctgt	600
tatttcatgt tccacatcgc ctgccttttc aggccttttg gaatgcgact ggaggccttg	660
aaaaatgcag ccgaagagaa agccagaccg gagttgcgcc gcattttcca actgcacact	720
aaagtccgcc gattgacgag ggaatgcgaa gtgttagttt caccctatgt tctatcccaa	780
gtggtcttca gtgccttcat catctgttc agtgccatc gactggtgca catgggcttc	840
aagcagcgac ctggactctt cgtgaccacc gtgcaattcg tggccgtcat gatcgtccag	900
atcttcttgc cctgttacta cggcaatgag ttgaccttc atgccaatgc actcactaat	960

agtgtcttcg gtaccaattg gctggagtag tccgtgggca ctcgcaagct gcttaactgc 1020
 tacatggagt tcctcaagcg accgggttaaa gtgcgagctg ggggtgttctt tgaaatagga 1080
 ctacccatct ttgtgaagac catcaacaat gcctacagtt tcttcgcct gctgctaaag 1140
 atatccaag 1149

<210> 34
 <211> 383
 <212> PRT
 <213> Drosophila Melanogaster DOR109

<400> 34

Met	Glu	Ser	Thr	Asn	Arg	Leu	Ser	Ala	Ile	Gln	Thr	Leu	Leu	Val	Ile	1	5	10	15
Gln	Arg	Trp	Ile	Gly	Leu	Leu	Lys	Trp	Glu	Asn	Glu	Gly	Glu	Asp	Gly	20	25	30	
Val	Leu	Thr	Trp	Leu	Lys	Arg	Ile	Tyr	Pro	Phe	Val	Leu	His	Leu	Pro	35	40	45	
Leu	Thr	Phe	Thr	Tyr	Ile	Ala	Leu	Met	Trp	Tyr	Glu	Ala	Ile	Thr	Ser	50	55	60	
Ser	Asp	Phe	Glu	Glu	Ala	Gly	Gln	Val	Leu	Tyr	Met	Ser	Ile	Thr	Glu	65	70	75	80
Leu	Ala	Leu	Val	Thr	Lys	Leu	Leu	Asn	Ile	Trp	Tyr	Arg	Arg	His	Glu	85	90	95	
Ala	Ala	Ser	Leu	Ile	His	Glu	Leu	Gln	His	Asp	Pro	Ala	Phe	Asn	Leu	100	105	110	
Arg	Asn	Ser	Glu	Glu	Ile	Lys	Phe	Trp	Gln	Gln	Asn	Gln	Arg	Asn	Phe	115	120	125	
Lys	Arg	Ile	Phe	Tyr	Trp	Tyr	Ile	Trp	Gly	Ser	Leu	Phe	Val	Ala	Val	130	135	140	
Met	Gly	Tyr	Ile	Ser	Val	Phe	Phe	Gln	Glu	Asp	Tyr	Glu	Leu	Pro	Phe	145	150	155	160
Gly	Tyr	Tyr	Val	Pro	Phe	Glu	Trp	Arg	Thr	Arg	Glu	Arg	Tyr	Phe	Tyr	165	170	175	
Ala	Trp	Gly	Tyr	Asn	Val	Val	Ala	Met	Thr	Leu	Cys	Cys	Leu	Ser	Asn	180	185	190	
Ile	Leu	Leu	Asp	Thr	Leu	Gly	Cys	Tyr	Phe	Met	Phe	His	Ile	Ala	Ser	195	200	205	

Leu Phe Arg Leu Leu Gly Met Arg Leu Glu Ala Leu Lys Asn Ala Ala
 210 215 220
 Glu Glu Lys Ala Arg Pro Glu Leu Arg Arg Ile Phe Gln Leu His Thr
 225 230 235 240
 Lys Val Arg Arg Leu Thr Arg Glu Cys Glu Val Leu Val Ser Pro Tyr
 245 250 255
 Val Leu Ser Gln Val Val Phe Ser Ala Phe Ile Ile Cys Phe Ser Ala
 260 265 270
 Tyr Arg Leu Val His Met Gly Phe Lys Gln Arg Pro Gly Leu Phe Val
 275 280 285
 Thr Thr Val Gln Phe Val Ala Val Met Ile Val Gln Ile Phe Leu Pro
 290 295 300
 Cys Tyr Tyr Gly Asn Glu Leu Thr Phe His Ala Asn Ala Leu Thr Asn
 305 310 315 320
 Ser Val Phe Gly Thr Asn Trp Leu Glu Tyr Ser Val Gly Thr Arg Lys
 325 330 335
 Leu Leu Asn Cys Tyr Met Glu Phe Leu Lys Arg Pro Val Lys Val Arg
 340 345 350
 Ala Gly Val Phe Phe Glu Ile Gly Leu Pro Ile Phe Val Lys Thr Ile
 355 360 365
 Asn Asn Ala Tyr Ser Phe Phe Ala Leu Leu Leu Lys Ile Ser Lys
 370 375 380

<210> 35

<211> 1161

<212> DNA

<213> Drosophila Melanogaster DOR110

<400> 35

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ataatctact atataacatc ctgtttgatt tttgcttggt gtgccgtata cttgccaatc	180
ggaatcatca ttagtttcaa aacggatatt aacacattca caccgaatga actgttgaca	240
gttatgcaat tatttttcaa ttcagtggga atgccattca aggttctgtt cttcaatttg	300
tatatttctg gattttacaa ggccaaaaag ctccttagcg aaatggacaa acgttgaccc	360
actttgaagg agcgagtgga agtgcaccaa ggtgtggtcc gttgcaacaa ggcctacctc	420
atttaccagt tcatttatac cgcgtacact atttcaacat ttctatcggc ggctcttagt	480

ggaaaattgc catggcgcat ctataatcct ttgtgtggatt ttcgagaaaag tagatccagt 540
 ttttggaaag ctgccctcaa cgagacagca cttatgctat ttgctgtgac tcaaacccta 600
 atgagtgata tatatccact gctttatggg ttgatccctga gagttcacct caaacttttg 660
 cgactaagag tggagagcct gtgcacagat tctggaaaaa gcgatgctga aaacgagcaa 720
 gatttgatta actatgctgc agcaatacga ccagcgggta cccgcacaat tttcgttcaa 780
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 aatattaagg tggctaagct ggcatcttcg gtgggttactt ttgtcaatca acttaacata 1140
 gctgacagat tgacaaagaa c 1161

<210> 36
 <211> 387
 <212> PRT
 <213> Drosophila Melanogaster DOR110

<400> 36

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			20					25					30		
Trp	His	Thr	Pro	Ala	Thr	His	Lys	Ile	Ile	Tyr	Tyr	Ile	Thr	Ser	Cys
		35					40					45			
Leu	Ile	Phe	Ala	Trp	Cys	Ala	Val	Tyr	Leu	Pro	Ile	Gly	Ile	Ile	Ile
	50					55					60				
Ser	Phe	Lys	Thr	Asp	Ile	Asn	Thr	Phe	Thr	Pro	Asn	Glu	Leu	Leu	Thr
65					70					75				80	
Val	Met	Gln	Leu	Phe	Phe	Asn	Ser	Val	Gly	Met	Pro	Phe	Lys	Val	Leu
				85					90					95	
Phe	Phe	Asn	Leu	Tyr	Ile	Ser	Gly	Phe	Tyr	Lys	Ala	Lys	Lys	Leu	Leu
			100					105					110		
Ser	Glu	Met	Asp	Lys	Arg	Cys	Thr	Thr	Leu	Lys	Glu	Arg	Val	Glu	Val
	115						120					125			

His Gln Gly Val Val Arg Cys Asn Lys Ala Tyr Leu Ile Tyr Gln Phe
 130 135 140
 Ile Tyr Thr Ala Tyr Thr Ile Ser Thr Phe Leu Ser Ala Ala Leu Ser
 145 150 155 160
 Gly Lys Leu Pro Trp Arg Ile Tyr Asn Pro Phe Val Asp Phe Arg Glu
 165 170 175
 Ser Arg Ser Ser Phe Trp Lys Ala Ala Leu Asn Glu Thr Ala Leu Met
 180 185 190
 Leu Phe Ala Val Thr Gln Thr Leu Met Ser Asp Ile Tyr Pro Leu Leu
 195 200 205
 Tyr Gly Leu Ile Leu Arg Val His Leu Lys Leu Leu Arg Leu Arg Val
 210 215 220
 Glu Ser Leu Cys Thr Asp Ser Gly Lys Ser Asp Ala Glu Asn Glu Gln
 225 230 235 240
 Asp Leu Ile Asn Tyr Ala Ala Ala Ile Arg Pro Ala Val Thr Arg Thr
 245 250 255
 Ile Phe Val Gln Phe Leu Leu Ile Gly Ile Cys Leu Gly Leu Ser Met
 260 265 270
 Ile Asn Leu Leu Phe Phe Ala Asp Ile Trp Thr Gly Leu Ala Thr Val
 275 280 285
 Ala Tyr Ile Asn Gly Leu Met Val Gln Thr Phe Pro Phe Cys Phe Val
 290 295 300
 Cys Asp Leu Leu Lys Lys Asp Cys Glu Leu Leu Val Ser Ala Ile Phe
 305 310 315 320
 His Ser Asn Trp Ile Asn Ser Ser Arg Ser Tyr Lys Ser Ser Leu Arg
 325 330 335
 Tyr Phe Leu Lys Asn Ala Gln Lys Ser Ile Ala Phe Thr Ala Gly Ser
 340 345 350
 Ile Phe Pro Ile Ser Thr Gly Ser Asn Ile Lys Val Ala Lys Leu Ala
 355 360 365
 Phe Ser Val Val Thr Phe Val Asn Gln Leu Asn Ile Ala Asp Arg Leu
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 Thr Lys Asn
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<210> 37
 <211> 1050
 <212> DNA

<213> Drosophila Melanogaster DOR111

<400> 37

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ccgaatgtga taaggcggtta cctgctacgt ttttatctgg tactcgggtt tctcaacttc      180
aatgcctatg tgggtgggca aatcgcgtagc tttatagtcc atataatgtc gacgactact      240
cttttgaggg ccactgcagt ggcaccgtgc attggettca gcttcatggc cgactttaag      300
cagttcggtc tcacagtga tagaaagcga ttggtcagat tgctggatga tctcaaggag      360
atatttcctt tagattttaga agcgcagcgg aagtataacg tatcgtttta ccggaaacac      420
atgaacaggg tcatgacctt attcaccatc ctctgcatga cctacacctc gtcatttagc      480
ttttatccag ccatcaagtc gaccataaag tattacctta tgggatcgga aatctttgag      540
cgcaactacg gatttcacat tttgtttccc tacgacgcag aaacggatct gacggctctac      600
tggttttccct actggggatt ggctcattgt gcctatgtgg ccggagtttc ctacgtctgc      660
gtggatctcc tgctgatcgc gaccataacc cagctgacca tgcacttcaa ctttatagcg      720
aatgatttgg aggctacga aggaggtgat catacggatg aagaaaatat caaatacctg      780
cacaacttgg tcgtctatca tgccagggcg ctggatatta acaagaaatg tacatttcag      840
agctctcgga ttggccattc ggcatttaat cagaactggg tgccatgcag caccaaatac      900
aaacgcaccc tgcaatttat tatcgcgcgc agccagaagc ccgcctctat aagaccgcct      960
acctttccac ccatatcttt taataccttt atgaaggtaa tcagcatgtc gtatcagttt    1020
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<210> 38

<211> 350

<212> PRT

<213> Drosophila Melanogaster DOR111

<400> 38

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Phe Asp Glu Leu Thr Arg Phe Pro Met Thr Phe Tyr Lys Thr Ile Gly
20          25          30
Glu Asp Leu Tyr Ser Asp Arg Asp Pro Asn Val Ile Arg Arg Tyr Leu
35          40          45
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Leu Arg Phe Tyr Leu Val Leu Gly Phe Leu Asn Phe Asn Ala Tyr Val
 50 55 60
 Val Gly Glu Ile Ala Tyr Phe Ile Val His Ile Met Ser Thr Thr Thr
 65 70 75 80
 Leu Leu Glu Ala Thr Ala Val Ala Pro Cys Ile Gly Phe Ser Phe Met
 85 90 95
 Ala Asp Phe Lys Gln Phe Gly Leu Thr Val Asn Arg Lys Arg Leu Val
 100 105 110
 Arg Leu Leu Asp Asp Leu Lys Glu Ile Phe Pro Leu Asp Leu Glu Ala
 115 120 125
 Gln Arg Lys Tyr Asn Val Ser Phe Tyr Arg Lys His Met Asn Arg Val
 130 135 140
 Met Thr Leu Phe Thr Ile Leu Cys Met Thr Tyr Thr Ser Ser Phe Ser
 145 150 155 160
 Phe Tyr Pro Ala Ile Lys Ser Thr Ile Lys Tyr Tyr Leu Met Gly Ser
 165 170 175
 Glu Ile Phe Glu Arg Asn Tyr Gly Phe His Ile Leu Phe Pro Tyr Asp
 180 185 190
 Ala Glu Thr Asp Leu Thr Val Tyr Trp Phe Ser Tyr Trp Gly Leu Ala
 195 200 205
 His Cys Ala Tyr Val Ala Gly Val Ser Tyr Val Cys Val Asp Leu Leu
 210 215 220
 Leu Ile Ala Thr Ile Thr Gln Leu Thr Met His Phe Asn Phe Ile Ala
 225 230 235 240
 Asn Asp Leu Glu Ala Tyr Glu Gly Gly Asp His Thr Asp Glu Glu Asn
 245 250 255
 Ile Lys Tyr Leu His Asn Leu Val Val Tyr His Ala Arg Ala Leu Asp
 260 265 270
 Ile Asn Lys Lys Cys Thr Phe Gln Ser Ser Arg Ile Gly His Ser Ala
 275 280 285
 Phe Asn Gln Asn Trp Leu Pro Cys Ser Thr Lys Tyr Lys Arg Ile Leu
 290 295 300
 Gln Phe Ile Ile Ala Arg Ser Gln Lys Pro Ala Ser Ile Arg Pro Pro
 305 310 315 320
 Thr Phe Pro Pro Ile Ser Phe Asn Thr Phe Met Lys Val Ile Ser Met
 325 330 335

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<210> 39
 <211> 1236
 <212> DNA
 <213> Drosophila Melanogaster DOR114

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 gatcacaagt acagtcaaaa gtggaaggag gtctctgctgc actggacatt cattgccag 180
 atggtaaatc tgaatacagt gctcatctcg gaactgattt acgtattcct ggcgatcggc 240
 aaaggtagca attttctgga ggccaccatg aatctgtctt tcattggatt tgtcatcggt 300
 ggtgacttca aaatctggaa catttcgcgg cagagaaaga gactcaccca agtggtcage 360
 cgattggaag aactgcatcc gcaaggcttg gctcaacaag aacctataa tatagggcat 420
 catctgagcg gctatagccg atatagcaaa ttttacttcg gcatgcacat ggtgctgata 480
 tggacgtaca acctgtattg ggccgtttac tatctgggtc gtgatttctg gctgggaatg 540
 cgtcaatttg agaggatgct gccctactac tgctgggttc cctgggattg gagtaccgga 600
 tatagctact atttcatgta tatctcagc aatatcggcg gtcaggcttg tctgtccggt 660
 cagctagcag ctgacatggt aatgtgcgcc ctggtcactt tgggtggtgat gcacttcac 720
 cggctttccg ctcacatcga gagtcatggt gcgggcattg gctcattcca gcacgatttg 780
 gagttcctcc aagcgacggt ggcgtatcac cagagcttga tccacctctg ccaggatata 840
 aatgagatat tcggtgtttc actgttggtc aactttgtat cctcgtcggt tatcatctgc 900
 tctgtgggtt tccagatgac catcggcagc aagatcgaca acctggtaat gcttgtgctt 960
 ttctgtttt gtgccatggt tcaggctctc atgattgcca cccatgctca gaggctcggt 1020
 gatgagtgat aacagattgg tcaagcggtc tataatcacg actgggtccg tgctgatctg 1080
 cggtatcgta aaatgctgat cctgattatt aagagggcc aacagccgag tcgactcaag 1140
 gccacaatgt tcctgaacat ctcaactggt accgtgtcgg atctcttgca actctcgta 1200
 aaattctttg cccttctcgc cacaatgtac gtgaat 1236

<210> 40
 <211> 412
 <212> PRT

<213> Drosophila Melanogaster DOR114

<400> 40

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Leu Ser Ile Gly Met Met Ala Tyr Asp His Lys Tyr Ser Gln Lys Trp
35 40 45
Lys Glu Val Leu Leu His Trp Thr Phe Ile Ala Gln Met Val Asn Leu
50 55 60
Asn Thr Val Leu Ile Ser Glu Leu Ile Tyr Val Phe Leu Ala Ile Gly
65 70 75 80
Lys Gly Ser Asn Phe Leu Glu Ala Thr Met Asn Leu Ser Phe Ile Gly
85 90 95
Phe Val Ile Val Gly Asp Phe Lys Ile Trp Asn Ile Ser Arg Gln Arg
100 105 110
Lys Arg Leu Thr Gln Val Val Ser Arg Leu Glu Glu Leu His Pro Gln
115 120 125
Gly Leu Ala Gln Gln Glu Pro Tyr Asn Ile Gly His His Leu Ser Gly
130 135 140
Tyr Ser Arg Tyr Ser Lys Phe Tyr Phe Gly Met His Met Val Leu Ile
145 150 155 160
Trp Thr Tyr Asn Leu Tyr Trp Ala Val Tyr Tyr Leu Val Cys Asp Phe
165 170 175
Trp Leu Gly Met Arg Gln Phe Glu Arg Met Leu Pro Tyr Tyr Cys Trp
180 185 190
Val Pro Trp Asp Trp Ser Thr Gly Tyr Ser Tyr Tyr Phe Met Tyr Ile
195 200 205
Ser Gln Asn Ile Gly Gly Gln Ala Cys Leu Ser Gly Gln Leu Ala Ala
210 215 220
Asp Met Leu Met Cys Ala Leu Val Thr Leu Val Val Met His Phe Ile
225 230 235 240
Arg Leu Ser Ala His Ile Glu Ser His Val Ala Gly Ile Gly Ser Phe
245 250 255
Gln His Asp Leu Glu Phe Leu Gln Ala Thr Val Ala Tyr His Gln Ser
260 265 270

Leu Ile His Leu Cys Gln Asp Ile Asn Glu Ile Phe Gly Val Ser Leu
 275 280 285
 Leu Ser Asn Phe Val Ser Ser Ser Phe Ile Ile Cys Phe Val Gly Phe
 290 295 300
 Gln Met Thr Ile Gly Ser Lys Ile Asp Asn Leu Val Met Leu Val Leu
 305 310 315 320
 Phe Leu Phe Cys Ala Met Val Gln Val Phe Met Ile Ala Thr His Ala
 325 330 335
 Gln Arg Leu Val Asp Ala Ser Glu Gln Ile Gly Gln Ala Val Tyr Asn
 340 345 350
 His Asp Trp Phe Arg Ala Asp Leu Arg Tyr Arg Lys Met Leu Ile Leu
 355 360 365
 Ile Ile Lys Arg Ala Gln Gln Pro Ser Arg Leu Lys Ala Thr Met Phe
 370 375 380
 Leu Asn Ile Ser Leu Val Thr Val Ser Asp Leu Leu Gln Leu Ser Tyr
 385 390 395 400
 Lys Phe Phe Ala Leu Leu Arg Thr Met Tyr Val Asn
 405 410

<210> 41
 <211> 1140
 <212> DNA

<213> Drosophila Melanogaster DOR115

<400> 41
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 gtgattaacc tcagcttcgt tggattatth gagagcattt acgtttacag tgccttcagt 180
 gataataagt tcctggaagc agtcactgcg ttgtcctaca ttggcttcgt aaccgtaggc 240
 atgagcaaga tgttcttcat ccggtggaag aaaacggcta taactgaact gattaatgaa 300
 ttgaaggaga tctatccgaa tggtttgatc cgagaggaaa gatacaatct gccgatgtat 360
 ctgggcacct gctccagaat cagccttata tattccttgc tctactctgt tctcatctgg 420
 acattcaact tgttttgtgt aatggagtat tgggtctatg acaagtggct caacattcga 480
 gtggtgggca aacagttgcc gtacctcatg tacattcctt ggaaatggca ggataactgg 540
 tcgtactatc cactgttatt ctcccagaat ttgacaggat acacatctgc agctgggtcaa 600
 atttcaaccg atgtcttgct ctgcgcgggtg gccactcagt tggtaatgca cttcgacttt 660

ctctcaaata gtatggaacg ccacgaattg agtggagatt ggaagaagga ctcccgattt 720
ctgggtggaca ttgttaggta tcacgaacgt atactccgcc tttcagatgc agtgaacgat 780
atatttggaa ttccactact actcaacttc atgggtatcct cgttcgtcat ctgcttcgtg 840
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gtctcttcga tgagtcaggt ctatttgatt tgtcactatg gtcaactggg gcccgatgct 960
agctacggat tttcggttgc cacctacaat cagaagtggg ataaagccga tgtgcgctat 1020
aaacgagcct tggttattat tatagctaga tcgcagaagg taacttttct aaaggccact 1080
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<210> 42
<211> 380
<212> PRT
<213> Drosophila Melanogaster DOR115

<400> 42

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Ile	Arg	Pro	Tyr	Thr	Asn	Gly	Glu	Glu	Ser	Lys	Met	Asn	Lys	Leu	Ile
			20					25					30		
Phe	His	Ile	Val	Phe	Trp	Ser	Asn	Val	Ile	Asn	Leu	Ser	Phe	Val	Gly
		35				40					45				
Leu	Phe	Glu	Ser	Ile	Tyr	Val	Tyr	Ser	Ala	Phe	Met	Asp	Asn	Lys	Phe
	50					55					60				
Leu	Glu	Ala	Val	Thr	Ala	Leu	Ser	Tyr	Ile	Gly	Phe	Val	Thr	Val	Gly
65					70					75				80	
Met	Ser	Lys	Met	Phe	Phe	Ile	Arg	Trp	Lys	Lys	Thr	Ala	Ile	Thr	Glu
				85					90					95	
Leu	Ile	Asn	Glu	Leu	Lys	Glu	Ile	Tyr	Pro	Asn	Gly	Leu	Ile	Arg	Glu
		100						105					110		
Glu	Arg	Tyr	Asn	Leu	Pro	Met	Tyr	Leu	Gly	Thr	Cys	Ser	Arg	Ile	Ser
	115						120					125			
Leu	Ile	Tyr	Ser	Leu	Leu	Tyr	Ser	Val	Leu	Ile	Trp	Thr	Phe	Asn	Leu
	130					135					140				
Phe	Cys	Val	Met	Glu	Tyr	Trp	Val	Tyr	Asp	Lys	Trp	Leu	Asn	Ile	Arg
145					150					155				160	
Val	Val	Gly	Lys	Gln	Leu	Pro	Tyr	Leu	Met	Tyr	Ile	Pro	Trp	Lys	Trp

165										170					175				
Gln	Asp	Asn	Trp	Ser	Tyr	Tyr	Pro	Leu	Leu	Phe	Ser	Gln	Asn	Phe	Ala				
			180					185					190						
Gly	Tyr	Thr	Ser	Ala	Ala	Gly	Gln	Ile	Ser	Thr	Asp	Val	Leu	Leu	Cys				
		195					200					205							
Ala	Val	Ala	Thr	Gln	Leu	Val	Met	His	Phe	Asp	Phe	Leu	Ser	Asn	Ser				
	210					215					220								
Met	Glu	Arg	His	Glu	Leu	Ser	Gly	Asp	Trp	Lys	Lys	Asp	Ser	Arg	Phe				
225					230					235					240				
Leu	Val	Asp	Ile	Val	Arg	Tyr	His	Glu	Arg	Ile	Leu	Arg	Leu	Ser	Asp				
			245					250						255					
Ala	Val	Asn	Asp	Ile	Phe	Gly	Ile	Pro	Leu	Leu	Leu	Asn	Phe	Met	Val				
		260						265					270						
Ser	Ser	Phe	Val	Ile	Cys	Phe	Val	Gly	Phe	Gln	Met	Thr	Val	Gly	Val				
		275					280					285							
Pro	Pro	Asp	Ile	Val	Val	Lys	Leu	Phe	Leu	Phe	Leu	Val	Ser	Ser	Met				
	290					295						300							
Ser	Gln	Val	Tyr	Leu	Ile	Cys	His	Tyr	Gly	Gln	Leu	Val	Ala	Asp	Ala				
305					310					315					320				
Ser	Tyr	Gly	Phe	Ser	Val	Ala	Thr	Tyr	Asn	Gln	Lys	Trp	Tyr	Lys	Ala				
			325						330					335					
Asp	Val	Arg	Tyr	Lys	Arg	Ala	Leu	Val	Ile	Ile	Ile	Ala	Arg	Ser	Gln				
			340					345					350						
Lys	Val	Thr	Phe	Leu	Lys	Ala	Thr	Ile	Phe	Leu	Asp	Ile	Thr	Arg	Ser				
		355					360					365							
Thr	Met	Thr	Asp	Val	Arg	Asn	Cys	Val	Leu	Ser	Val								
	370					375					380								

<210> 43
 <211> 759
 <212> DNA
 <213> Drosophila Melanogaster DOR116

<400> 43	
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cagacggtga caatgctcgt gcaaggagtc ggattctact ccggtgattt gtctgtattt	180
ctcggcttaa cgcagatcct aactttcgcc gatatgctgc aggtgaaggt gaaagagcta	240

aacgatgccc tggaacaaaa agcggaatac agagctctag tccgagttgg agcttctatt 300
 gatggagcgg aaaatcgta acgccttctc ttggatgtta taagatggca tcaattatcc 360
 acggactact gtcgcgccat aaatgccctc tactacgaat tgatcgccac tcagggtctt 420
 tccgatggctt tggccatgat gctcagcttc tgcattaatt tgagcagctt tcacatgcct 480
 tccgctatct ttttcgtggt ttctgcctac agcatgtcca tctattgcat tctgggcacc 540
 attcttgagt ttgcatatga ccagggtgtac gagagcatct gtaatgtgac ctgggtatgag 600
 ttgagtggcg aacagcgaaa gctttttggt tttttgttgc gggaaatccca gtatccgcac 660
 aatattcaga tacttgaggt tatgtcgctt tccgtgagaa cggctctgca gattgttaaa 720
 ctaatttata gcgtatccat gatgatgatg aatcgggcg 759

<210> 44
 <211> 253
 <212> PRT
 <213> Drosophila Melanogaster DOR116

<400> 44

Met	Glu	Leu	Leu	Pro	Leu	Ala	Met	Leu	Met	Tyr	Asp	Gly	Thr	Arg	Val
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Thr	Ala	Met	Gln	Tyr	Leu	Ile	Pro	Gly	Leu	Pro	Leu	Glu	Asn	Asn	Tyr
			20					25					30		
Cys	Tyr	Val	Val	Thr	Tyr	Met	Ile	Gln	Thr	Val	Thr	Met	Leu	Val	Gln
		35					40					45			
Gly	Val	Gly	Phe	Tyr	Ser	Gly	Asp	Leu	Phe	Val	Phe	Leu	Gly	Leu	Thr
	50					55					60				
Gln	Ile	Leu	Thr	Phe	Ala	Asp	Met	Leu	Gln	Val	Lys	Val	Lys	Glu	Leu
65					70					75				80	
Asn	Asp	Ala	Leu	Glu	Gln	Lys	Ala	Glu	Tyr	Arg	Ala	Leu	Val	Arg	Val
			85						90					95	
Gly	Ala	Ser	Ile	Asp	Gly	Ala	Glu	Asn	Arg	Gln	Arg	Leu	Leu	Leu	Asp
			100					105					110		
Val	Ile	Arg	Trp	His	Gln	Leu	Phe	Thr	Asp	Tyr	Cys	Arg	Ala	Ile	Asn
		115					120					125			
Ala	Leu	Tyr	Tyr	Glu	Leu	Ile	Ala	Thr	Gln	Val	Leu	Ser	Met	Ala	Leu
	130					135					140				
Ala	Met	Met	Leu	Ser	Phe	Cys	Ile	Asn	Leu	Ser	Ser	Phe	His	Met	Pro
145					150					155					160

Ser Ala Ile Phe Phe Val Val Ser Ala Tyr Ser Met Ser Ile Tyr Cys
 165 170 175
 Ile Leu Gly Thr Ile Leu Glu Phe Ala Tyr Asp Gln Val Tyr Glu Ser
 180 185 190
 Ile Cys Asn Val Thr Trp Tyr Glu Leu Ser Gly Glu Gln Arg Lys Leu
 195 200 205
 Phe Gly Phe Leu Leu Arg Glu Ser Gln Tyr Pro His Asn Ile Gln Ile
 210 215 220
 Leu Gly Val Met Ser Leu Ser Val Arg Thr Ala Leu Gln Ile Val Lys
 225 230 235 240
 Leu Ile Tyr Ser Val Ser Met Met Met Met Asn Arg Ala
 245 250

<210> 45
 <211> 1152
 <212> DNA
 <213> Drosophila Melanogaster DOR117

<400> 45
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 cctgccaaagt ttttcgtggc ctacgtgctc tggctccttcg cactgaattt ctgctcaaca 180
 ttttatcagc caattggcct tctcacaggc tatataagcc atttatcaga gttctccccg 240
 ggagagtttc taacttcgct gcaggtggcc tttaatgctt ggtcctgctc tacaaaagtc 300
 ctgatagtgt gggcactagt taagcgcttt gacgaggcta ataaccttct cgacgagatg 360
 gataggcgta tcacagaccc cggagagcgt cttcagattc atcgcgctgt ctccctcagt 420
 aaccttatat tcttcttttt catggcagtc tacatgggtt atgccactaa tacgtttctg 480
 tcggcgatct tcattggaag gccaccgtac caaaattact acccttttct ggactggcga 540
 tctagcactc tgcacttagc tctgcaggcc ggtctggaat acttcgccat ggctggcgcc 600
 tgcttccagg acgtttgcgt tgattgctac ccagtcaatt tcgttttggt cctgcgtgcc 660
 cacatgtcga tcttcgcgga gcgccttcga cgtttgggaa cttatcctta tgaaagccag 720
 gagcagaaat atgaacgatt ggttcagtgc atacaagatc acaaagtaat tttgcgattt 780
 gttgactgcc tgcgtcctgt tatttctggt accatcttcg tgcaattctt ggttggtggg 840
 ttggtgctgg gctttaccct aattaacatt gtcctgttcg ccaacttggg atcggccatc 900

gcagcgctct cgtttatggc cgcagtgcct ctagagacga ctccttctg catattgtgc 960
aattatctca cagaagactg ctacaagctg gccgatgcc tgtttcagtc aaactggatt 1020
gatgaggaga aacgatacca aaagacactc atgtacttcc tacagaaact gcagcagcct 1080
ataaccttca tggctatgaa cgtgtttcca atatctgtgg gaactaacat cagtgtgaagc 1140
agatgtgccc tt 1152

<210> 46
<211> 384
<212> PRT
<213> Drosophila Melanogaster DOR117

<400> 46

Met	Asp	Leu	Arg	Arg	Trp	Phe	Pro	Thr	Leu	Tyr	Thr	Gln	Ser	Lys	Asp	1	5	10	15
Ser	Pro	Val	Arg	Ser	Arg	Asp	Ala	Thr	Leu	Tyr	Leu	Leu	Arg	Cys	Val	20	25	30	
Phe	Leu	Met	Gly	Val	Arg	Lys	Pro	Pro	Ala	Lys	Phe	Phe	Val	Ala	Tyr	35	40	45	
Val	Leu	Trp	Ser	Phe	Ala	Leu	Asn	Phe	Cys	Ser	Thr	Phe	Tyr	Gln	Pro	50	55	60	
Ile	Gly	Phe	Leu	Thr	Gly	Tyr	Ile	Ser	His	Leu	Ser	Glu	Phe	Ser	Pro	65	70	75	80
Gly	Glu	Phe	Leu	Thr	Ser	Leu	Gln	Val	Ala	Phe	Asn	Ala	Trp	Ser	Cys	85	90	95	
Ser	Thr	Lys	Val	Leu	Ile	Val	Trp	Ala	Leu	Val	Lys	Arg	Phe	Asp	Glu	100	105	110	
Ala	Asn	Asn	Leu	Leu	Asp	Glu	Met	Asp	Arg	Arg	Ile	Thr	Asp	Pro	Gly	115	120	125	
Glu	Arg	Leu	Gln	Ile	His	Arg	Ala	Val	Ser	Leu	Ser	Asn	Arg	Ile	Phe	130	135	140	
Phe	Phe	Phe	Met	Ala	Val	Tyr	Met	Val	Tyr	Ala	Thr	Asn	Thr	Phe	Leu	145	150	155	160
Ser	Ala	Ile	Phe	Ile	Gly	Arg	Pro	Pro	Tyr	Gln	Asn	Tyr	Tyr	Pro	Phe	165	170	175	
Leu	Asp	Trp	Arg	Ser	Ser	Thr	Leu	His	Leu	Ala	Leu	Gln	Ala	Gly	Leu	180	185	190	
Glu	Tyr	Phe	Ala	Met	Ala	Gly	Ala	Cys	Phe	Gln	Asp	Val	Cys	Val	Asp				

195	200	205
Cys Tyr Pro Val Asn Phe Val Leu Val Leu Arg Ala His Met Ser Ile 210 215 220		
Phe Ala Glu Arg Leu Arg Arg Leu Gly Thr Tyr Pro Tyr Glu Ser Gln 225 230 235 240		
Glu Gln Lys Tyr Glu Arg Leu Val Gln Cys Ile Gln Asp His Lys Val 245 250 255		
Ile Leu Arg Phe Val Asp Cys Leu Arg Pro Val Ile Ser Gly Thr Ile 260 265 270		
Phe Val Gln Phe Leu Val Val Gly Leu Val Leu Gly Phe Thr Leu Ile 275 280 285		
Asn Ile Val Leu Phe Ala Asn Leu Gly Ser Ala Ile Ala Ala Leu Ser 290 295 300		
Phe Met Ala Ala Val Leu Leu Glu Thr Thr Pro Phe Cys Ile Leu Cys 305 310 315 320		
Asn Tyr Leu Thr Glu Asp Cys Tyr Lys Leu Ala Asp Ala Leu Phe Gln 325 330 335		
Ser Asn Trp Ile Asp Glu Glu Lys Arg Tyr Gln Lys Thr Leu Met Tyr 340 345 350		
Phe Leu Gln Lys Leu Gln Gln Pro Ile Thr Phe Met Ala Met Asn Val 355 360 365		
Phe Pro Ile Ser Val Gly Thr Asn Ile Ser Val Ser Arg Cys Ala Leu 370 375 380		

<210> 47
 <211> 1116
 <212> DNA
 <213> Drosophila Melanogaster DOR118

<400> 47	
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tacatgaagc agatcaagtc cttctccctt ggagagtttc tcacttcact ccagggtgtgc	180
attaatgcct acggctcatc ggtaaaagtt gcaatcacat actccatgct ctgggcgcctt	240
atcaaggcca agaacatttt ggaccagctg gacctgcgct gcaccgccat ggaggagcgc	300
gaaaagatcc acctagtggg ggcccgagc aaccatgcct ttctcatctt cacctttgtc	360
tactgcggat atgccggctc cacctacctg agctcgggtc tcagcgggag tccgccctgg	420

cagctgtaca atccctttat tgattggcat gacggcacac tcaagctctg ggtggcctcc 480
 acgttggagt acatgggtgat gtcaggcgcc gttctgcagg atcaactctc ggactcttac 540
 ccattgatct ataccctcat ccttcgtgct cacttggaca tgctaaggga gcgcatccga 600
 cgcctccgtt ccgatgagaa cctgagcgag gccgagagct atgaagagct ggtcaaatgt 660
 gtgatggacc acaagctcat tctaagatac tgcgcgatta ttaaaccagt aatccagggg 720
 accatcttca cacagtttct gctgatcggc ctggttcttg gcttcacgct gatcaacgtg 780
 tttttcttct cagacatctg gacgggcacg gcatcattta tgtttggtat aaccattttg 840
 ctgcagacct tccccttctg ctacacatgc aacctcatca tggaggactg cgagtccttg 900
 acccatgcta ttttccagtc caactgggtg gatgccagtc gtcgctacaa aacaacacta 960
 ctgtattttc tccaaaacgt gcagcagcct atcgttttca ttgcaggcgg tatctttcag 1020
 atatccatga gcagcaacat aagtgtggca aagtttgctt tctccgtgat aaccattacc 1080
 aagcaaatga atatagctga caaatttaag acggac 1116

<210> 48
 <211> 372
 <212> PRT
 <213> Drosophila Melanogaster DOR118

<400> 48

Met	Lys	Phe	Ile	Gly	Trp	Leu	Pro	Pro	Lys	Gln	Gly	Val	Leu	Arg	Tyr
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Val	Tyr	Leu	Thr	Trp	Thr	Leu	Met	Thr	Phe	Val	Trp	Cys	Thr	Thr	Tyr
			20					25					30		
Leu	Pro	Leu	Gly	Phe	Leu	Gly	Ser	Tyr	Met	Thr	Gln	Ile	Lys	Ser	Phe
		35					40					45			
Ser	Pro	Gly	Glu	Phe	Leu	Thr	Ser	Leu	Gln	Val	Cys	Ile	Asn	Ala	Tyr
	50					55					60				
Gly	Ser	Ser	Val	Lys	Val	Ala	Ile	Thr	Tyr	Ser	Met	Leu	Trp	Arg	Leu
65				70					75					80	
Ile	Lys	Ala	Lys	Asn	Ile	Leu	Asp	Gln	Leu	Asp	Leu	Arg	Cys	Thr	Ala
			85					90						95	
Met	Glu	Glu	Arg	Glu	Lys	Ile	His	Leu	Val	Val	Ala	Arg	Ser	Asn	His
			100					105					110		
Ala	Phe	Leu	Ile	Phe	Thr	Phe	Val	Tyr	Cys	Gly	Tyr	Ala	Gly	Ser	Thr
	115						120					125			

Tyr Leu Ser Ser Val Leu Ser Gly Arg Pro Pro Trp Gln Leu Tyr Asn
 130 135 140
 Pro Phe Ile Asp Trp His Asp Gly Thr Leu Lys Leu Trp Val Ala Ser
 145 150 155 160
 Thr Leu Glu Tyr Met Val Met Ser Gly Ala Val Leu Gln Asp Gln Leu
 165 170 175
 Ser Asp Ser Tyr Pro Leu Ile Tyr Thr Leu Ile Leu Arg Ala His Leu
 180 185 190
 Asp Met Leu Arg Glu Arg Ile Arg Arg Leu Arg Ser Asp Glu Asn Leu
 195 200 205
 Ser Glu Ala Glu Ser Tyr Glu Glu Leu Val Lys Cys Val Met Asp His
 210 215 220
 Lys Leu Ile Leu Arg Tyr Cys Ala Ile Ile Lys Pro Val Ile Gln Gly
 225 230 235 240
 Thr Ile Phe Thr Gln Phe Leu Leu Ile Gly Leu Val Leu Gly Phe Thr
 245 250 255
 Leu Ile Asn Val Phe Phe Phe Ser Asp Ile Trp Thr Gly Ile Ala Ser
 260 265 270
 Phe Met Phe Val Ile Thr Ile Leu Leu Gln Thr Phe Pro Phe Cys Tyr
 275 280 285
 Thr Cys Asn Leu Ile Met Glu Asp Cys Glu Ser Leu Thr His Ala Ile
 290 295 300
 Phe Gln Ser Asn Trp Val Asp Ala Ser Arg Arg Tyr Lys Thr Thr Leu
 305 310 315 320
 Leu Tyr Phe Leu Gln Asn Val Gln Gln Pro Ile Val Phe Ile Ala Gly
 325 330 335
 Gly Ile Phe Gln Ile Ser Met Ser Ser Asn Ile Ser Val Ala Lys Phe
 340 345 350
 Ala Phe Ser Val Ile Thr Ile Thr Lys Gln Met Asn Ile Ala Asp Lys
 355 360 365
 Phe Lys Thr Asp
 370

<210> 49
 <211> 1194
 <212> DNA
 <213> Drosophila Melanogaster DOR119
 <400> 49

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 ctgccgtgg gcttcatcat cagctacgtg caggagttca agaacttcac gccgggagag 240
 ttccttacct cgctgcaggt gtgcatcaat gtgtatggcg cctcggtgaa gtccaccatc 300
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 aggcctggcga acgacagcga tcgcgagagg atccacaata tggaggcgcg ctgcaactac 420
 gcctttctca tctacagctt catctactgc ggatacgcgg gtccactttt cctgtcctac 480
 gccctcagtg gtgcgtctcc gtgggtccgc tacaatccct tcactgattg gcgcgatggc 540
 atgggcagcc tgtggatcca ggccatattc gactacatca ccatgtcctt cgccgtgctg 600
 caggaccagc tatccgacac gtatcccttg atgttcacca ttatgttccg ggcccacatg 660
 gaggtcctca aggatcacgt gcggagcctg cgcattggatc ccgagcgag tgaggcagac 720
 aactatcagg atctggtgaa ctgcgtgctg gaccacaaga ctatactgaa atgctgtgac 780
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 ctctgttctg tcatcaccat cctgctgcag accttccgt tctgctacac ctgcaacatg 960
 ctgatcgacg atgccaggga tctgtccaac gagattttcc agtccaactg ggtggacgag 1020
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 ttcattgccg gaggcattct tcccatctct atgaacagca acataaccgt ggccaagttc 1140
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<210> 50
 <211> 398
 <212> PRT
 <213> Drosophila Melanogaster DOR119

<400> 50

Met	Ala	Val	Phe	Lys	Leu	Ile	Lys	Pro	Ala	Pro	Leu	Thr	Glu	Lys	Val
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Gln	Ser	Arg	Gln	Gly	Asn	Ile	Tyr	Leu	Tyr	Arg	Ala	Met	Trp	Leu	Ile
			20					25					30		
Gly	Trp	Ile	Pro	Pro	Lys	Glu	Gly	Val	Leu	Arg	Tyr	Val	Tyr	Leu	Phe

35					40					45					
Trp	Thr	Cys	Val	Pro	Phe	Ala	Phe	Gly	Val	Phe	Tyr	Leu	Pro	Val	Gly
50					55					60					
Phe	Ile	Ile	Ser	Tyr	Val	Gln	Glu	Phe	Lys	Asn	Phe	Thr	Pro	Gly	Glu
65					70					75					80
Phe	Leu	Thr	Ser	Leu	Gln	Val	Cys	Ile	Asn	Val	Tyr	Gly	Ala	Ser	Val
				85					90					95	
Lys	Ser	Thr	Ile	Thr	Tyr	Leu	Phe	Leu	Trp	Arg	Leu	Arg	Lys	Thr	Glu
			100					105					110		
Ile	Leu	Leu	Asp	Ser	Leu	Asp	Lys	Arg	Leu	Ala	Asn	Asp	Ser	Asp	Arg
			115				120					125			
Glu	Arg	Ile	His	Asn	Met	Val	Ala	Arg	Cys	Asn	Tyr	Ala	Phe	Leu	Ile
	130					135					140				
Tyr	Ser	Phe	Ile	Tyr	Cys	Gly	Tyr	Ala	Gly	Ser	Thr	Phe	Leu	Ser	Tyr
145					150					155					160
Ala	Leu	Ser	Gly	Arg	Pro	Pro	Trp	Ser	Val	Tyr	Asn	Pro	Phe	Ile	Asp
				165					170					175	
Trp	Arg	Asp	Gly	Met	Gly	Ser	Leu	Trp	Ile	Gln	Ala	Ile	Phe	Glu	Tyr
			180					185					190		
Ile	Thr	Met	Ser	Phe	Ala	Val	Leu	Gln	Asp	Gln	Leu	Ser	Asp	Thr	Tyr
		195					200					205			
Pro	Leu	Met	Phe	Thr	Ile	Met	Phe	Arg	Ala	His	Met	Glu	Val	Leu	Lys
	210					215					220				
Asp	His	Val	Arg	Ser	Leu	Arg	Met	Asp	Pro	Glu	Arg	Ser	Glu	Ala	Asp
225					230				235					240	
Asn	Tyr	Gln	Asp	Leu	Val	Asn	Cys	Val	Leu	Asp	His	Lys	Thr	Ile	Leu
			245						250					255	
Lys	Cys	Cys	Asp	Met	Ile	Arg	Pro	Met	Ile	Ser	Arg	Thr	Ile	Phe	Val
			260					265					270		
Gln	Phe	Ala	Leu	Ile	Gly	Ser	Val	Leu	Gly	Leu	Thr	Leu	Val	Asn	Val
		275					280					285			
Phe	Phe	Phe	Ser	Asn	Phe	Trp	Lys	Gly	Val	Ala	Ser	Leu	Leu	Phe	Val
	290					295					300				
Ile	Thr	Ile	Leu	Leu	Gln	Thr	Phe	Pro	Phe	Cys	Tyr	Thr	Cys	Asn	Met
305					310					315					320
Leu	Ile	Asp	Asp	Ala	Gln	Asp	Leu	Ser	Asn	Glu	Ile	Phe	Gln	Ser	Asn
				325					330					335	

Trp Val Asp Ala Glu Pro Arg Tyr Lys Ala Thr Leu Val Leu Phe Met
 340 345 350

His His Val Gln Gln Pro Ile Ile Phe Ile Ala Gly Gly Ile Phe Pro
 355 360 365

Ile Ser Met Asn Ser Asn Ile Thr Val Ala Lys Phe Ala Phe Ser Ile
 370 375 380

Ile Thr Ile Val Arg Gln Met Asn Leu Ala Glu Gln Phe Gln
 385 390 395

<210> 51
 <211> 1233
 <212> DNA
 <213> Drosophila Melanogaster DOR120

<400> 51
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 ggggctctgc tccgatggat ctactccctg tggactctga ccacgatgtg gctgggtatc 180
 gtgtacctgc cgctcggact gagcctcacc tatgtgaagc acttcgatag attcacgccg 240
 acggagttcc tgacctccct gcagggtgat atcaactgca tcgggaacgt gatcaagtca 300
 tgcgtaactt attcccagat gtggcgtttt cgccggatga atgagcttat ctgcctccctg 360
 gacaagagat gtgtgactac gacacagcgt cgaattttcc ataagatggt ggcacgggtt 420
 aatctcatcg tgattctggt cttgtccacg tacttgggct tctgctttct aactctgttc 480
 acttcggttt tcgctggcaa agctccttgg cagctgtaca acccactggt ggactggcgg 540
 aaaggccatt ggcagctatg gattgcctcc atcctggagt actgtgtggt ctccattggc 600
 accatgcagg agttgatgtc cgacacctac gccatagtgt tcatctcctt gttccgctgc 660
 cacctggcta ttctcagaga tcgcatagct aatctgcggc aggatccgaa actcagttag 720
 atggaacact atgagcagat ggtggcctgc attcaggatc atcgaacccat catacagtgc 780
 tcccagatta ttcgacccat cctgtcgatc actatctttg cccagttcat gctggttggc 840
 attgacttgg gtctggcggc catcagcatc ctcttcttcc cgaacacccat ttggacgatc 900
 atggcaaacg tgtcgttcat cgtggccatc tgtacagagt cctttccatg ctgcatgtc 960
 tgcgagcatc tgatcgagga ctccgtccat gtgagcaacg cctgtttcca ctcaaactgg 1020
 ataaccgcgg acaggagcta caagtcggcg gttctgtatt tctgcaccg ggctcagcaa 1080

cccattcaat tcacggccgg ctccatattt cccatttcgg tgcagagcaa catagccgtg 1140
 gccaaagtgc cgttcacaat catcacaatc gtgaacaaaa tgaatctggg cgagaagttc 1200
 ttcagtgaca ggagcaatgg cgatataaat cct 1233

<210> 52
 <211> 411
 <212> PRT
 <213> Drosophila Melanogaster DOR120

<400> 52

Met	Thr	Lys	Phe	Phe	Phe	Lys	Arg	Leu	Gln	Thr	Ala	Pro	Leu	Asp	Gln	1	5	10	15
Glu	Val	Ser	Ser	Leu	Asp	Ala	Ser	Asp	Tyr	Tyr	Tyr	Arg	Ile	Ala	Phe	20	25	30	
Phe	Leu	Gly	Trp	Thr	Pro	Pro	Lys	Gly	Ala	Leu	Leu	Arg	Trp	Ile	Tyr	35	40	45	
Ser	Leu	Trp	Thr	Leu	Thr	Thr	Met	Trp	Leu	Gly	Ile	Val	Tyr	Leu	Pro	50	55	60	
Leu	Gly	Leu	Ser	Leu	Thr	Tyr	Val	Lys	His	Phe	Asp	Arg	Phe	Thr	Pro	65	70	75	80
Thr	Glu	Phe	Leu	Thr	Ser	Leu	Gln	Val	Asp	Ile	Asn	Cys	Ile	Gly	Asn	85	90	95	
Val	Ile	Lys	Ser	Cys	Val	Thr	Tyr	Ser	Gln	Met	Trp	Arg	Phe	Arg	Arg	100	105	110	
Met	Asn	Glu	Leu	Ile	Ser	Ser	Leu	Asp	Lys	Arg	Cys	Val	Thr	Thr	Thr	115	120	125	
Gln	Arg	Arg	Ile	Phe	His	Lys	Met	Val	Ala	Arg	Val	Asn	Leu	Ile	Val	130	135	140	
Ile	Leu	Phe	Leu	Ser	Thr	Tyr	Leu	Gly	Phe	Cys	Phe	Leu	Thr	Leu	Phe	145	150	155	160
Thr	Ser	Val	Phe	Ala	Gly	Lys	Ala	Pro	Trp	Gln	Leu	Tyr	Asn	Pro	Leu	165	170	175	
Val	Asp	Trp	Arg	Lys	Gly	His	Trp	Gln	Leu	Trp	Ile	Ala	Ser	Ile	Leu	180	185	190	
Glu	Tyr	Cys	Val	Val	Ser	Ile	Gly	Thr	Met	Gln	Glu	Leu	Met	Ser	Asp	195	200	205	
Thr	Tyr	Ala	Ile	Val	Phe	Ile	Ser	Leu	Phe	Arg	Cys	His	Leu	Ala	Ile	210	215	220	

Leu Arg Asp Arg Ile Ala Asn Leu Arg Gln Asp Pro Lys Leu Ser Glu
 225 230 235 240
 Met Glu His Tyr Glu Gln Met Val Ala Cys Ile Gln Asp His Arg Thr
 245 250 255
 Ile Ile Gln Cys Ser Gln Ile Ile Arg Pro Ile Leu Ser Ile Thr Ile
 260 265 270
 Phe Ala Gln Phe Met Leu Val Gly Ile Asp Leu Gly Leu Ala Ala Ile
 275 280 285
 Ser Ile Leu Phe Phe Pro Asn Thr Ile Trp Thr Ile Met Ala Asn Val
 290 295 300
 Ser Phe Ile Val Ala Ile Cys Thr Glu Ser Phe Pro Cys Cys Met Leu
 305 310 315 320
 Cys Glu His Leu Ile Glu Asp Ser Val His Val Ser Asn Ala Leu Phe
 325 330 335
 His Ser Asn Trp Ile Thr Ala Asp Arg Ser Tyr Lys Ser Ala Val Leu
 340 345 350
 Tyr Phe Leu His Arg Ala Gln Gln Pro Ile Gln Phe Thr Ala Gly Ser
 355 360 365
 Thr Phe Pro Ile Ser Val Gln Ser Asn Ile Ala Val Ala Lys Phe Ala
 370 375 380
 Phe Thr Ile Ile Thr Ile Val Asn Gln Met Asn Leu Gly Glu Lys Phe
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 Phe Ser Asp Arg Ser Asn Gly Asp Ile Asn Pro
 405 410

<210> 53

<211> 1203

<212> DNA

<213> Drosophila Melanogaster DOR121

<400> 53

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tcggtggcca gtttcatgcc cctgaccatt gcgtttggcc tgcaaaacgt ccaaaatgtg	180
gagcaattaa ccgactcact ctgctcgggt ctcgtggatt tgctggcct gtgcaaaatc	240
gggcttttcc tttggcttta caaggacttc aagttcctaa tagggcagtt ctattgtgtt	300
ttgcaaacgg aaaccacac cgctgtcgct gaaatgatag tgaccaggga aagtcgtcgg	360

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gatcagttca tcagtgttat gtagcctac tgtttcatta cggtggcct ttcggcctgc 420
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ttccatttcc cagtgtgtaa gaaaaagtac tgcttaatat ccagaatatt aagatacagt 540
ttctgcagat atccctggga caatatgaag ctgtccaact acatcatttc ctatttctgg 600
aatgtgtgtg ctgcattggg cgtggcactg cccaccgttt gtgtggacac actgttctgt 660
tctctgagcc ataatctctg tgccctatcc cagattgcca ggcacaaaat gatgcacttt 720
gagggcagaa ataccaaaga gactcatgag aacttaaagc acgtgtttca actatatgcg 780
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ccagcggtac tcttctatgc cgcatttacg gcagcagttg ttggccaggt gtctatatac 960
tgcttctgcg gatcgagcat ccattcggag tgctcagctat ttggccaggc catctacgag 1020
tccagctggc cccatctgct gcaggaaaac ctgcagcttg taagctcett aaaaattgcc 1080
atgatcgcat cgagtttggg atgtcccatc gatggttact tcttcgaggc caatcgggag 1140
acgctcatca cggtgagtaa agcgtttata aaagtgtcca aaaagacacc tcaagtgaat 1200
gat 1203

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<210> 54
<211> 401
<212> PRT
<213> Drosophila Melanogaster DOR121

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<400> 54
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Leu Gly Leu Glu Leu Leu His Glu Gln Asp Val Gly His Arg Tyr Pro
20          25          30
Trp Arg Ser Ile Cys Cys Ile Leu Ser Val Ala Ser Phe Met Pro Leu
35          40          45
Thr Ile Ala Phe Gly Leu Gln Asn Val Gln Asn Val Glu Gln Leu Thr
50          55          60
Asp Ser Leu Cys Ser Val Leu Val Asp Leu Leu Ala Leu Cys Lys Ile
65          70          75          80
Gly Leu Phe Leu Trp Leu Tyr Lys Asp Phe Lys Phe Leu Ile Gly Gln
85          90          95

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Phe	Tyr	Cys	Val	Leu	Gln	Thr	Glu	Thr	His	Thr	Ala	Val	Ala	Glu	Met	100	105	110
Ile	Val	Thr	Arg	Glu	Ser	Arg	Arg	Asp	Gln	Phe	Ile	Ser	Ala	Met	Tyr	115	120	125
Ala	Tyr	Cys	Phe	Ile	Thr	Ala	Gly	Leu	Ser	Ala	Cys	Leu	Met	Ser	Pro	130	135	140
Leu	Ser	Met	Leu	Ile	Ser	Tyr	His	Glu	Gln	Val	Asn	Cys	Ser	Arg	Asn	145	150	155
Phe	His	Phe	Pro	Val	Cys	Lys	Lys	Lys	Tyr	Cys	Leu	Ile	Ser	Arg	Ile	165	170	175
Leu	Arg	Tyr	Ser	Phe	Cys	Arg	Tyr	Pro	Trp	Asp	Asn	Met	Lys	Leu	Ser	180	185	190
Asn	Tyr	Ile	Ile	Ser	Tyr	Phe	Trp	Asn	Val	Cys	Ala	Ala	Leu	Gly	Val	195	200	205
Ala	Leu	Pro	Thr	Val	Cys	Val	Asp	Thr	Leu	Phe	Cys	Ser	Leu	Ser	His	210	215	220
Asn	Leu	Cys	Ala	Leu	Phe	Gln	Ile	Ala	Arg	His	Lys	Met	Met	His	Phe	225	230	235
Glu	Gly	Arg	Asn	Thr	Lys	Glu	Thr	His	Glu	Asn	Leu	Lys	His	Val	Phe	245	250	255
Gln	Leu	Tyr	Ala	Leu	Cys	Leu	Asn	Leu	Gly	His	Phe	Leu	Asn	Glu	Tyr	260	265	270
Phe	Arg	Pro	Leu	Ile	Cys	Gln	Phe	Val	Ala	Ala	Ser	Leu	His	Leu	Cys	275	280	285
Val	Leu	Cys	Tyr	Gln	Leu	Ser	Ala	Asn	Ile	Leu	Gln	Pro	Ala	Leu	Leu	290	295	300
Phe	Tyr	Ala	Ala	Phe	Thr	Ala	Ala	Val	Val	Gly	Gln	Val	Ser	Ile	Tyr	305	310	315
Cys	Phe	Cys	Gly	Ser	Ser	Ile	His	Ser	Glu	Cys	Gln	Leu	Phe	Gly	Gln	325	330	335
Ala	Ile	Tyr	Glu	Ser	Ser	Trp	Pro	His	Leu	Leu	Gln	Glu	Asn	Leu	Gln	340	345	350
Leu	Val	Ser	Ser	Leu	Lys	Ile	Ala	Met	Met	Arg	Ser	Ser	Leu	Gly	Cys	355	360	365
Pro	Ile	Asp	Gly	Tyr	Phe	Phe	Glu	Ala	Asn	Arg	Glu	Thr	Leu	Ile	Thr	370	375	380

Val Ser Lys Ala Phe Ile Lys Val Ser Lys Lys Thr Pro Gln Val Asn
 385 390 395 400

Asp

<210> 55
 <211> 1122
 <212> DNA
 <213> Drosophila Melanogaster DOR14

<400> 55
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 ttgcacgttc catttacatt cttgtttgtg ttgcttttgt ggttggaggc aatcaagagc 180
 agggatatac agcataaccg cgatgtcctt ttgatttgcc taaccaccac tgccttggga 240
 ggtaaagtta tcaatatctg gaagtatgcc catgtggccc aaggcatttt gtccgagtgg 300
 agcacgtggg atcttttcga gctgaggagc aaacaggaag tggatatgtg gcgattcgag 360
 catcgacgtt tcaatcgtgt ttttatgttt tactgtttgt gcagtgtctg tgtaatccca 420
 tttattgtga ttcaaccgtt gtttgatata ccaaatacgat tgccttctctg gatgtggaca 480
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 catctgtcct tgtgtttgcg tatgttgggc cagcgattga gtaagcttca gcatgatgac 660
 aaggatctga gggagaagtt cctggaactg atccatctgc accagcgact caagcaacag 720
 gccttgagca ttgaaatctt tatttcgaag agcacgttca cccaaattct ggtcagttcc 780
 cttatcattt gcttcaccat ttacagcatg cagatggact tgccaggatt tgccgccatg 840
 atgcagtacc tagtggccat gatcatgcag gtcagtctgc ccaccatata tggtaacgcc 900
 gtcacgtgatt ctgcaaatat gttgaccgat tccatgtaca attcggattg gccggatatg 960
 aattgccgaa tgcgtcgctt agttttaatg tttatggtgt acttaaatcg accggtgacc 1020
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<210> 56
 <211> 374
 <212> PRT
 <213> Drosophila Melanogaster DOR14

<400> 56

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Lys	Trp	Trp	Arg	Leu	Trp	Pro	Arg	Lys	Glu	Ser	Val	Ser	Thr	Pro	Asp
			20					25					30		
Trp	Thr	Asn	Trp	Gln	Ala	Tyr	Ala	Leu	His	Val	Pro	Phe	Thr	Phe	Leu
		35					40					45			
Phe	Val	Leu	Leu	Leu	Trp	Leu	Glu	Ala	Ile	Lys	Ser	Arg	Asp	Ile	Gln
	50					55					60				
His	Thr	Ala	Asp	Val	Leu	Leu	Ile	Cys	Leu	Thr	Thr	Thr	Ala	Leu	Gly
65					70					75					80
Gly	Lys	Val	Ile	Asn	Ile	Trp	Lys	Tyr	Ala	His	Val	Ala	Gln	Gly	Ile
				85					90					95	
Leu	Ser	Glu	Trp	Ser	Thr	Trp	Asp	Leu	Phe	Glu	Leu	Arg	Ser	Lys	Gln
			100					105					110		
Glu	Val	Asp	Met	Trp	Arg	Phe	Glu	His	Arg	Arg	Phe	Asn	Arg	Val	Phe
		115					120					125			
Met	Phe	Tyr	Cys	Leu	Cys	Ser	Ala	Gly	Val	Ile	Pro	Phe	Ile	Val	Ile
	130					135					140				
Gln	Pro	Leu	Phe	Asp	Ile	Pro	Asn	Arg	Leu	Pro	Phe	Trp	Met	Trp	Thr
145					150					155					160
Pro	Phe	Asp	Trp	Gln	Gln	Pro	Val	Leu	Phe	Trp	Tyr	Ala	Phe	Ile	Tyr
				165					170					175	
Gln	Ala	Thr	Thr	Ile	Pro	Ile	Ala	Cys	Ala	Cys	Asn	Val	Thr	Met	Asp
			180					185					190		
Ala	Val	Asn	Trp	Tyr	Leu	Met	Leu	His	Leu	Ser	Leu	Cys	Leu	Arg	Met
		195					200					205			
Leu	Gly	Gln	Arg	Leu	Ser	Lys	Leu	Gln	His	Asp	Asp	Lys	Asp	Leu	Arg
	210					215						220			
Glu	Lys	Phe	Leu	Glu	Leu	Ile	His	Leu	His	Gln	Arg	Leu	Lys	Gln	Gln
225					230					235					240
Ala	Leu	Ser	Ile	Glu	Ile	Phe	Ile	Ser	Lys	Ser	Thr	Phe	Thr	Gln	Ile
				245					250					255	
Leu	Val	Ser	Ser	Leu	Ile	Ile	Cys	Phe	Thr	Ile	Tyr	Ser	Met	Gln	Met
			260					265					270		
Asp	Leu	Pro	Gly	Phe	Ala	Ala	Met	Met	Gln	Tyr	Leu	Val	Ala	Met	Ile

275	280	285
Met Gln Val Met Leu Pro Thr Ile Tyr Gly Asn Ala Val Ile Asp Ser		
290	295	300
Ala Asn Met Leu Thr Asp Ser Met Tyr Asn Ser Asp Trp Pro Asp Met		
305	310	315
Asn Cys Arg Met Arg Arg Leu Val Leu Met Phe Met Val Tyr Leu Asn		
	325	330
Arg Pro Val Thr Leu Lys Ala Gly Gly Phe Phe His Ile Gly Leu Pro		
	340	345
Leu Phe Thr Lys Val Val Phe Ser Thr Leu Glu Asn Pro Cys Ile Ser		
	355	365
Tyr Leu Tyr Phe Arg Pro		
370		

<210> 57
 <211> 1140
 <212> DNA
 <213> Drosophila Melanogaster DOR16

<400> 57
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 gcccatctgc tcttcgtgtt cgccttcgcc atggtggtgg tgggtgcggt gggcgaggtg 180
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 ggcacggcga caaatgccgc cttcaccttg caaccgctga ttatgggtct ctaccgctgg 480
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 gagcggcaca atgcgattat cgattttctgc acggacctaa caccgcagtt caccgttatc 840
 gttttaatgc atttctctgc cgccgccttc gtcctctgct cgaccatcct ggacatcatg 900

ttggtgagcc ccttttcaga ggccttcctt tggggcgggt atccttgggt ttgtcgcgcc 960
 actggcctttt cgcacgcct gcattcggcg gctgttttaa aagtttttcc ctgttttcac 1020
 tgtttgctgt ttttccttg cttttccagc cgctccgttc tgattcgggt ttcccgattt 1080
 gtttgtttgc tttgtggctg cggtcgggc tctctcgggt ggcaatttat aagcgcata 1140

<210> 58
 <211> 379
 <212> PRT
 <213> Drosophila Melanogaster DOR16

<400> 58

Met	Thr	Asp	Ser	Gly	Gln	Pro	Ala	Ile	Ala	Asp	His	Phe	Tyr	Arg	Ile	
1				5					10					15		
Pro	Arg	Ile	Ser	Gly	Leu	Ile	Val	Gly	Leu	Trp	Pro	Gln	Arg	Ile	Arg	
			20					25					30			
Gly	Gly	Gly	Gly	Arg	Pro	Trp	His	Ala	His	Leu	Leu	Phe	Val	Phe	Ala	
			35				40					45				
Phe	Ala	Met	Val	Val	Val	Gly	Ala	Val	Gly	Glu	Val	Ser	Tyr	Gly	Cys	
	50					55					60					
Val	His	Leu	Asp	Asn	Leu	Val	Val	Ala	Leu	Glu	Ala	Phe	Cys	Pro	Gly	
65					70					75					80	
Thr	Thr	Lys	Ala	Val	Cys	Val	Leu	Lys	Leu	Trp	Val	Phe	Phe	Arg	Ser	
				85					90					95		
Asn	Arg	Arg	Trp	Ala	Glu	Leu	Val	Gln	Arg	Leu	Arg	Ala	Ile	Leu	Trp	
			100					105					110			
Glu	Ser	Arg	Arg	Gln	Glu	Ala	Gln	Arg	Met	Leu	Val	Gly	Leu	Ala	Thr	
			115				120					125				
Thr	Ala	Asn	Arg	Leu	Ser	Leu	Leu	Leu	Ser	Ser	Gly	Thr	Ala	Thr		
	130					135				140						
Asn	Ala	Ala	Phe	Thr	Leu	Gln	Pro	Leu	Ile	Met	Gly	Leu	Tyr	Arg	Trp	
145					150					155					160	
Ile	Val	Gln	Leu	Pro	Gly	Gln	Thr	Glu	Leu	Pro	Phe	Asn	Ile	Ile	Leu	
				165				170					175			
Pro	Ser	Phe	Ala	Val	Gln	Pro	Gly	Val	Phe	Pro	Leu	Thr	Tyr	Val	Leu	
			180					185					190			
Leu	Thr	Ala	Ser	Gly	Ala	Cys	Thr	Val	Phe	Ala	Phe	Ser	Phe	Val	Asp	
	195						200					205				

Gly Phe Phe Ile Cys Ser Cys Leu Tyr Ile Cys Gly Ala Phe Arg Leu
 210 215 220
 Val Gln Gln Asp Ile Arg Arg Ile Phe Ala Asp Leu His Gly Asp Ser
 225 230 235 240
 Val Asp Val Phe Thr Glu Glu Met Asn Ala Glu Val Arg His Arg Leu
 245 250 255
 Ala Gln Val Val Glu Arg His Asn Ala Ile Ile Asp Phe Cys Thr Asp
 260 265 270
 Leu Thr Arg Gln Phe Thr Val Ile Val Leu Met His Phe Leu Ser Ala
 275 280 285
 Ala Phe Val Leu Cys Ser Thr Ile Leu Asp Ile Met Leu Val Ser Pro
 290 295 300
 Phe Ser Glu Ala Phe Leu Trp Gly Gly Tyr Pro Trp Val Cys Arg Ala
 305 310 315 320
 Thr Gly Phe Ser His Arg Leu His Ser Ala Ala Val Leu Lys Val Phe
 325 330 335
 Pro Cys Phe His Cys Leu Leu Phe Phe Pro Gly Phe Ser Ser Arg Ser
 340 345 350
 Val Leu Ile Arg Phe Ser Arg Phe Val Cys Leu Leu Cys Gly Cys Gly
 355 360 365
 Cys Gly Ser Leu Arg Trp Gln Phe Ile Ser Ala
 370 375

<210> 59
 <211> 1215
 <212> DNA
 <213> Drosophila Melanogaster DOR20

<400> 59
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 ttgtggcctc agatagaacg ccggtggaga atcatccacc aggtgaacta tgtccacgta 120
 attgtgtttt ggggtgctgct ctttgatctc ctcttggtgc tccatgtgat ggctaatttg 180
 agctacatgt ccgaggttgt gaaagccatc tttatcctgg ccaccagtgc agggcacacc 240
 accaagctgc tgtccataaa ggcaacaat gtgcagatgg aggagctctt taggagattg 300
 gataacgaag agttccgtcc tagaggcgcc aacgaagagt tgatctttgc agcagcctgt 360
 gaaagaagta ggaagcttcg ggacttctat ggagcgcttt cgtttgccgc cttgagcatg 420
 attctcatcacc ccagtttcgc cttggactgg tccacacctc cgctcaaaac atacaatccg 480

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cttggcgaga ataccggctc acctgcttat tggctcctct actgctatca gtgtctggcc 540
ttgtccgtat cctgcatcac caacatagga ttcgactcac tctgctcctc actgttcate 600
ttcctcaagt gccagctgga cattctggcc gtgcgactgg acaagatcgg tcggttaatc 660
actacttctg gtggcactgt ggaacagcaa cttaaggaaa atatccgcta tcacatgacc 720
atcgttgaac tgtcgaaaaa cgtggagcgt ctactttgca agccgatttc ggtgcagatc 780
ttctgctcgg ttttggtgct gactgccaat ttctatgcca ttgctgtggt gagctgtgaa 840
ttcgcaacaa gaagactatc agtatgtgac ctatcaggcg tgcattgtga ttcagatttt 900
tatattgtgc tactatgccg ggtgggtatt ccatatccga aatgcctccc caggccagta 960
atgaatttca tcgtcagtga ggtaacccag cgcagcctgg accttccgca cgagctgtac 1020
aagacctcct ggggtggactg ggactacagg agccgaagga ttgcgctcct ctttatgcaa 1080
cgccttcact cgaccttgag gattaggaca cttaatccaa gtcttggttt tgacttaatg 1140
ctcttcagct cggtgagttc tttccgtgtt ttgacttttt tgtgcactgt agccaatttc 1200
cataatgagg ctcat 1215

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<210> 60
<211> 405
<212> PRT
<213> Drosophila Melanogaster DOR20

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<400> 60

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Met Ser Lys Gly Val Glu Ile Phe Tyr Lys Gly Gln Lys Ala Phe Leu
1          5          10          15
Asn Ile Leu Ser Leu Trp Pro Gln Ile Glu Arg Arg Trp Arg Ile Ile
20        25        30
His Gln Val Asn Tyr Val His Val Ile Val Phe Trp Val Leu Leu Phe
35        40        45
Asp Leu Leu Leu Val Leu His Val Met Ala Asn Leu Ser Tyr Met Ser
50        55        60
Glu Val Val Lys Ala Ile Phe Ile Leu Ala Thr Ser Ala Gly His Thr
65        70        75        80
Thr Lys Leu Leu Ser Ile Lys Ala Asn Asn Val Gln Met Glu Glu Leu
85        90        95
Phe Arg Arg Leu Asp Asn Glu Glu Phe Arg Pro Arg Gly Ala Asn Glu
100       105       110

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Glu Leu Ile Phe Ala Ala Ala Cys Glu Arg Ser Arg Lys Leu Arg Asp
 115 120 125
 Phe Tyr Gly Ala Leu Ser Phe Ala Ala Leu Ser Met Ile Leu Ile Pro
 130 135 140
 Gln Phe Ala Leu Asp Trp Ser His Leu Pro Leu Lys Thr Tyr Asn Pro
 145 150 155 160
 Leu Gly Glu Asn Thr Gly Ser Pro Ala Tyr Trp Leu Leu Tyr Cys Tyr
 165 170 175
 Gln Cys Leu Ala Leu Ser Val Ser Cys Ile Thr Asn Ile Gly Phe Asp
 180 185 190
 Ser Leu Cys Ser Ser Leu Phe Ile Phe Leu Lys Cys Gln Leu Asp Ile
 195 200 205
 Leu Ala Val Arg Leu Asp Lys Ile Gly Arg Leu Ile Thr Ser Gly
 210 215 220
 Gly Thr Val Glu Gln Gln Leu Lys Glu Asn Ile Arg Tyr His Met Thr
 225 230 235 240
 Ile Val Glu Leu Ser Lys Thr Val Glu Arg Leu Leu Cys Lys Pro Ile
 245 250 255
 Ser Val Gln Ile Phe Cys Ser Val Leu Val Leu Thr Ala Asn Phe Tyr
 260 265 270
 Ala Ile Ala Val Val Ser Cys Glu Phe Ala Thr Arg Arg Leu Ser Val
 275 280 285
 Cys Asp Leu Ser Gly Val His Val Asp Ser Asp Phe Tyr Ile Val Leu
 290 295 300
 Leu Cys Arg Val Gly Ile Pro Tyr Pro Lys Cys Leu Pro Arg Pro Val
 305 310 315 320
 Met Asn Phe Ile Val Ser Glu Val Thr Gln Arg Ser Leu Asp Leu Pro
 325 330 335
 His Glu Leu Tyr Lys Thr Ser Trp Val Asp Trp Asp Tyr Arg Ser Arg
 340 345 350
 Arg Ile Ala Leu Leu Phe Met Gln Arg Leu His Ser Thr Leu Arg Ile
 355 360 365
 Arg Thr Leu Asn Pro Ser Leu Gly Phe Asp Leu Met Leu Phe Ser Ser
 370 375 380
 Val Ser Ser Phe Arg Val Leu Thr Phe Leu Cys Thr Val Ala Asn Phe
 385 390 395 400

His Asn Glu Ala His
405

<210> 61
<211> 1203
<212> DNA
<213> Drosophila Melanogaster DOR25

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<400> 61
atgaacgact cgggttatca atcaaatctc agccttctgc gggtttttct cgacgagttc      60
cgatcggttc tgcggcagga aagtcccggc ctcacccac gcctggcttt ttactatgtt      120
cgcgcctttc tgagcttgcc cctgtaccga tggatcaact tgttcacat gtgcaatgtg      180
atgaccattt tctggacat gttcgtggcc ctgccgagt cgaagaacgt gatcgaaatg      240
ggcgacgact tggtttgat ttccgggatg gcaactggtg tcaccaagat cttttacatg      300
catttgcgtt gcgacgagat cgatgaactt atttcggatt ttgaatacta caaccgggag      360
ctgagacccc ataatatcga tgaggagggtg ttgggttggc agagactgtg ctacgtgata      420
gaatcgggtc tatatatcaa ctgcttttgc ctggtaact tcttcagtgc cgctattttc      480
ctgcaacctc tgttgggcca gggaaagctg cccttcacac gcgtctatcc gtttcaatgg      540
catcgcttgg atctgcatcc ctacacgttc tggttcctct acatctggca gagtctgacc      600
tcgcagcaca acctaagtag cattctaagt gtggatatgg taggcatttc caggttcctc      660
cagacggcgc tcaatctcaa gttgctttgc atcgagataa ggaaactggg ggacatggag      720
gtcagtgata agaggttcca cgaggagttt tgtcgtgtgg ttcgcttcca ccagcacatt      780
atcaagttgg tggggaaagc caatagagct ttcaatggcg ccttcaatgc acaattaatg      840
gccagtttct ccctgatttc catatccact ttcgagacca tggctgcagc ggctgtggat      900
cccaaatgga ccgccaagtt cgtgcttctc atgctggtgg cattcattca actgtcgctt      960
tggtgctgct ctggaacttt ggtttatact cagtcagtgg aggtggetca ggctgctttt     1020
gatatcaacg attggcacac caaatcgcca ggcacccaga gggatatatc ctttgtgata     1080
ctacgagccc agaaaccctt gatgtatgtg gccgaacat ttctgccctt caccctggga     1140
acctatatgc ttgtactgaa gaactgctat cgtttgctgg ccctgatgca agaatcgatg     1200
tag                                                                    1203

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<210> 62
<211> 400
<212> PRT

<213> Drosophila Melanogaster DOR25

<400> 62

Met Asn Asp Ser Gly Tyr Gln Ser Asn Leu Ser Leu Leu Arg Val Phe
1 5 10 15
Leu Asp Glu Phe Arg Ser Val Leu Arg Gln Glu Ser Pro Gly Leu Ile
20 25 30
Pro Arg Leu Ala Phe Tyr Tyr Val Arg Ala Phe Leu Ser Leu Pro Leu
35 40 45
Tyr Arg Trp Ile Asn Leu Phe Ile Met Cys Asn Val Met Thr Ile Phe
50 55 60
Trp Thr Met Phe Val Ala Leu Pro Glu Ser Lys Asn Val Ile Glu Met
65 70 75 80
Gly Asp Asp Leu Val Trp Ile Ser Gly Met Ala Leu Val Phe Thr Lys
85 90 95
Ile Phe Tyr Met His Leu Arg Cys Asp Glu Ile Asp Glu Leu Ile Ser
100 105 110
Asp Phe Glu Tyr Tyr Asn Arg Glu Leu Arg Pro His Asn Ile Asp Glu
115 120 125
Glu Val Leu Gly Trp Gln Arg Leu Cys Tyr Val Ile Glu Ser Gly Leu
130 135 140
Tyr Ile Asn Cys Phe Cys Leu Val Asn Phe Phe Ser Ala Ala Ile Phe
145 150 155 160
Leu Gln Pro Leu Leu Gly Glu Gly Lys Leu Pro Phe His Ser Val Tyr
165 170 175
Pro Phe Gln Trp His Arg Leu Asp Leu His Pro Tyr Thr Phe Trp Phe
180 185 190
Leu Tyr Ile Trp Gln Ser Leu Thr Ser Gln His Asn Leu Met Ser Ile
195 200 205
Leu Met Val Asp Met Val Gly Ile Ser Thr Phe Leu Gln Thr Ala Leu
210 215 220
Asn Leu Lys Leu Leu Cys Ile Glu Ile Arg Lys Leu Gly Asp Met Glu
225 230 235 240
Val Ser Asp Lys Arg Phe His Glu Glu Phe Cys Arg Val Val Arg Phe
245 250 255
His Gln His Ile Ile Lys Leu Val Gly Lys Ala Asn Arg Ala Phe Asn
260 265 270

Gly Ala Phe Asn Ala Gln Leu Met Ala Ser Phe Ser Leu Ile Ser Ile
 275 280 285
 Ser Thr Phe Glu Thr Met Ala Ala Ala Val Asp Pro Lys Met Ala
 290 295 300
 Ala Lys Phe Val Leu Leu Met Leu Val Ala Phe Ile Gln Leu Ser Leu
 305 310 315 320
 Trp Cys Val Ser Gly Thr Leu Val Tyr Thr Gln Ser Val Glu Val Ala
 325 330 335
 Gln Ala Ala Phe Asp Ile Asn Asp Trp His Thr Lys Ser Pro Gly Ile
 340 345 350
 Gln Arg Asp Ile Ser Phe Val Ile Leu Arg Ala Gln Lys Pro Leu Met
 355 360 365
 Tyr Val Ala Glu Pro Phe Leu Pro Phe Thr Leu Gly Thr Tyr Met Leu
 370 375 380
 Val Leu Lys Asn Cys Tyr Arg Leu Leu Ala Leu Met Gln Glu Ser Met
 385 390 395 400

<210> 63

<211> 1368

<212> DNA

<213> Drosophila Melanogaster DOR28

<400> 63

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gtgctcagaa tctggacaat tgtccttagc gtgagtagct tggcatcgct ttatgggcac	180
tggaacaaat tagccaggtta cattcatgat attccacgca ttggagagac cgctggaact	240
gccctgcagt tcctaacatc gatagcaaag atgtggtact ttctgtttgc ccatagacag	300
atatacgaat tgctacgaaa ggcgcgctgc catgaattac tccaaaagtg tgagctcttt	360
gaaaggatgt cagatctacc tgttatcaaa gagattcgcc agcagggttga gtccacgatg	420
aatcggtact gggccagcac tcgtcggcaa attcttatct atttgtacag ctgtatttgt	480
attactacaa actactttat caactccttc gtaatcaacc tctatcgcta tttcactaaa	540
ccgaaaggat cctacgacat aatgttacct ctgccatctc tgtatccgcg ctgggagcac	600
aagggattag agtttcccta ctatcatata cagatgtacc tggaaacctg ttctctgtat	660
atctgcggca tgtgtgccgt tagctttgat ggagtcttta ttgtcctgtg ccttcatagc	720
gtgggactta tgaggtcact taaccaaag gtggaacaag ccacatctga gttggttctt	780

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ccagatcgca gggttgaata cttgcatgac tgtatttatc agtaccaacg agtggcgaac      840
tttgcaaccg aggttaacaa ctgctttcgg cacatcactt tcacgcagtt cctgcttagc      900
cttttcaact ggggcctggc cttgttccaa atgagcgctcg gattggggcaa caacagcagc      960
atcaccatga tccggatgac catgtacctg gtggcagccg gctatcagat agttgtgtac     1020
tgctacaatg gccagcgatt tgcgactgct agcgaggaga ttgccaacgc cttttaccag     1080
gtgcatgagg acggagagtc cagggagttc cgccacctca tccgcatgat gctgatgcgc     1140
acgaaccggg gattcaggct ggacgtgtcc tggttcatgc aaatgtcctt gcccacactc     1200
atggcggtga gtagcggagc agagcagagc aggggtcctg caggtcctgc aggtcctgca     1260
ggtcaccccc caagggtccc ctccacagc cagttccact tgattgatc gcagatggtc     1320
cggacaagtg gacagtactt cctgctgctg cagaacgtca accagaaa                     1368

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<210> 64
<211> 456
<212> PRT
<213> Drosophila Melanogaster DOR28

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<400> 64

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Met Tyr Ser Pro Glu Glu Ala Ala Glu Leu Lys Arg Arg Asn Tyr Arg
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Ser Ile Arg Glu Met Ile Arg Leu Ser Tyr Thr Val Gly Phe Asn Leu
20          25          30
Leu Asp Pro Ser Arg Cys Gly Gln Val Leu Arg Ile Trp Thr Ile Val
35          40          45
Leu Ser Val Ser Ser Leu Ala Ser Leu Tyr Gly His Trp Gln Met Leu
50          55          60
Ala Arg Tyr Ile His Asp Ile Pro Arg Ile Gly Glu Thr Ala Gly Thr
65          70          75          80
Ala Leu Gln Phe Leu Thr Ser Ile Ala Lys Met Trp Tyr Phe Leu Phe
85          90          95
Ala His Arg Gln Ile Tyr Glu Leu Leu Arg Lys Ala Arg Cys His Glu
100         105         110
Leu Leu Gln Lys Cys Glu Leu Phe Glu Arg Met Ser Asp Leu Pro Val
115         120         125
Ile Lys Glu Ile Arg Gln Gln Val Glu Ser Thr Met Asn Arg Tyr Trp
130         135         140

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Ala Ser Thr Arg Arg Gln Ile Leu Ile Tyr Leu Tyr Ser Cys Ile Cys
 145 150 155 160
 Ile Thr Thr Asn Tyr Phe Ile Asn Ser Phe Val Ile Asn Leu Tyr Arg
 165 170 175
 Tyr Phe Thr Lys Pro Lys Gly Ser Tyr Asp Ile Met Leu Pro Leu Pro
 180 185 190
 Ser Leu Tyr Pro Ala Trp Glu His Lys Gly Leu Glu Phe Pro Tyr Tyr
 195 200 205
 His Ile Gln Met Tyr Leu Glu Thr Cys Ser Leu Tyr Ile Cys Gly Met
 210 215 220
 Cys Ala Val Ser Phe Asp Gly Val Phe Ile Val Leu Cys Leu His Ser
 225 230 235 240
 Val Gly Leu Met Arg Ser Leu Asn Gln Met Val Glu Gln Ala Thr Ser
 245 250 255
 Glu Leu Val Pro Pro Asp Arg Arg Val Glu Tyr Leu Arg Cys Cys Ile
 260 265 270
 Tyr Gln Tyr Gln Arg Val Ala Asn Phe Ala Thr Glu Val Asn Asn Cys
 275 280 285
 Phe Arg His Ile Thr Phe Thr Gln Phe Leu Leu Ser Leu Phe Asn Trp
 290 295 300
 Gly Leu Ala Leu Phe Gln Met Ser Val Gly Leu Gly Asn Asn Ser Ser
 305 310 315 320
 Ile Thr Met Ile Arg Met Thr Met Tyr Leu Val Ala Ala Gly Tyr Gln
 325 330 335
 Ile Val Val Tyr Cys Tyr Asn Gly Gln Arg Phe Ala Thr Ala Ser Glu
 340 345 350
 Glu Ile Ala Asn Ala Phe Tyr Gln Val Arg Trp Tyr Gly Glu Ser Arg
 355 360 365
 Glu Phe Arg His Leu Ile Arg Met Met Leu Met Arg Thr Asn Arg Gly
 370 375 380
 Phe Arg Leu Asp Val Ser Trp Phe Met Gln Met Ser Leu Pro Thr Leu
 385 390 395 400
 Met Ala Val Ser Ser Gly Ala Glu Gln Ser Arg Gly Pro Ala Gly Pro
 405 410 415
 Ala Gly Pro Ala Gly Pro Pro Pro Arg Val Pro Ser Tyr Ser Gln Phe
 420 425 430

His Leu Ile Asp Ser Gln Met Val Arg Thr Ser Gly Gln Tyr Phe Leu
 435 440 445

Leu Leu Gln Asn Val Asn Gln Lys
 450 455

<210> 65
 <211> 1239
 <212> DNA
 <213> Drosophila Melanogaster DOR30

<400> 65
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 aggaatctct tcaattgctt ctatgccctt ggcatgcagg caccggatgg cagtcgaccg 120
 accacgagca gcacatggca acgcatctac gcctgcttct cggtggtcat gtacgtgtgg 180
 caactgctgc tgggtcccac attctttgtg atcagctatc ggtacatggg cgcatggag 240
 attaccagg tgctgacctc cgcccagggtg gccatcgatg cggtcattct gccggccaag 300
 attgtggcac tggcgtggaa ttgccattg ctgcgcagag cagagcatca tctggccgcc 360
 ttggatgcgc ggtgcaggga acaggaggag ttccaattga tcctcgatgc ggtgaggttt 420
 tgcaactatc tggatgggt ctaccagatc tgctatgcca tctactcctc gtcgacattt 480
 gtgtgcgctt tcctgctggg ccaaccgcca tatgccctct atttgcctgg cctcgattgg 540
 cagcgttccc agatgcagtt ctgcatccag gcctggattg agttccttat catgaactgg 600
 acgtgcctgc accaagctag cgatgatgtg tacgccgtta tctatctgta tgtggtccgg 660
 attcaagtgc aattgctggc caggcgggtg gagaagtgg gcacggatga tagtggccag 720
 gtggagatct atcccgatga gcggcgggcag gaggagcatt gcgcggaact gcagcgtgc 780
 attgtagatc accagacgat gctgcagctg ctcgactgca ttagtcccgt catctcgcgt 840
 accatattcg ttcagttcct gatcaccgcc gccatcatgg gcaccacat gatcaacatt 900
 ttcattttcg ccaatacga cacaagatc gcacgatca tttacctgct ggcggtgacc 960
 ctgcagacgg ctccatgttg ctatcaggcc acctcgctga tgttgacaa cgagaggctg 1020
 gccctggcca tcttcagtg ccagtggctg ggccagagtg cccggttccg taagatgctg 1080
 ctctactatc ttcacgcgc ccagcagccc atcacgctga ccgccatgaa gctgtttccc 1140
 atcaatctgg ccacgtactt cagtatagcc aagttctcgt tttcgcteta cacgctcatc 1200
 aaggggatga atctcggcga gcgattcaac aggacaaat 1239

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<210> 66
<211> 413
<212> PRT
<213> Drosophila Melanogaster DOR30

<400> 66

Met Ala Val Ser Thr Arg Val Ala Thr Lys Gln Glu Val Pro Glu Ser
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Arg Arg Ala Phe Arg Asn Leu Phe Asn Cys Phe Tyr Ala Leu Gly Met
20 25 30
Gln Ala Pro Asp Gly Ser Arg Pro Thr Thr Ser Ser Thr Trp Gln Arg
35 40 45
Ile Tyr Ala Cys Phe Ser Val Val Met Tyr Val Trp Gln Leu Leu Leu
50 55 60
Val Pro Thr Phe Phe Val Ile Ser Tyr Arg Tyr Met Gly Gly Met Glu
65 70 75 80
Ile Thr Gln Val Leu Thr Ser Ala Gln Val Ala Ile Asp Ala Val Ile
85 90 95
Leu Pro Ala Lys Ile Val Ala Leu Ala Trp Asn Leu Pro Leu Leu Arg
100 105 110
Arg Ala Glu His His Leu Ala Ala Leu Asp Ala Arg Cys Arg Glu Gln
115 120 125
Glu Glu Phe Gln Leu Ile Leu Asp Ala Val Arg Phe Cys Asn Tyr Leu
130 135 140
Val Trp Phe Tyr Gln Ile Cys Tyr Ala Ile Tyr Ser Ser Ser Thr Phe
145 150 155 160
Val Cys Ala Phe Leu Leu Gly Gln Pro Pro Tyr Ala Leu Tyr Leu Pro
165 170 175
Gly Leu Asp Trp Gln Arg Ser Gln Met Gln Phe Cys Ile Gln Ala Trp
180 185 190
Ile Glu Phe Leu Ile Met Asn Trp Thr Cys Leu His Gln Ala Ser Asp
195 200 205
Asp Val Tyr Ala Val Ile Tyr Leu Tyr Val Val Arg Ile Gln Val Gln
210 215 220
Leu Leu Ala Arg Arg Val Glu Lys Leu Gly Thr Asp Asp Ser Gly Gln
225 230 235 240
Val Glu Ile Tyr Pro Asp Glu Arg Arg Gln Glu Glu His Cys Ala Glu
245 250 255

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Leu Gln Arg Cys Ile Val Asp His Gln Thr Met Leu Gln Leu Leu Asp
 260 265 270
 Cys Ile Ser Pro Val Ile Ser Arg Thr Ile Phe Val Gln Phe Leu Ile
 275 280 285
 Thr Ala Ala Ile Met Gly Thr Thr Met Ile Asn Ile Phe Ile Phe Ala
 290 295 300
 Asn Thr Asn Thr Lys Ile Ala Ser Ile Ile Tyr Leu Leu Ala Val Thr
 305 310 315 320
 Leu Gln Thr Ala Pro Cys Cys Tyr Gln Ala Thr Ser Leu Met Leu Asp
 325 330 335
 Asn Glu Arg Leu Ala Leu Ala Ile Phe Gln Cys Gln Trp Leu Gly Gln
 340 345 350
 Ser Ala Arg Phe Arg Lys Met Leu Leu Tyr Tyr Leu His Arg Ala Gln
 355 360 365
 Gln Pro Ile Thr Leu Thr Ala Met Lys Leu Phe Pro Ile Asn Leu Ala
 370 375 380
 Thr Tyr Phe Ser Ile Ala Lys Phe Ser Phe Ser Leu Tyr Thr Leu Ile
 385 390 395 400
 Lys Gly Met Asn Leu Gly Glu Arg Phe Asn Arg Thr Asn
 405 410

<210> 67

<211> 1191

<212> DNA

<213> Drosophila Melanogaster DOR31

<400> 67

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ctgatctact taaacagatc catagatcaa atgggatgga gactgccgcc acgaactaag	120
ccgtactggg ggctctatta catttggaac ttgggtgtca tagtactcgt ctttatcttt	180
ataccctatg gactgataat gactggaata aaggagttca agaacttcac gaccacggat	240
ctgtttacgt atgtccaggt gccggttaac accaatgctt cgatcatgaa gggcattata	300
gtgtgtgtta tgcggcggcg attttcaagg gtcagaaga tgatggacgc catggacatt	360
cgatgcacca agatggagga gaaagtccag gtgcaccgag cagcagcctt atgcaatcgt	420
gttggtgtga tttaccattg catatacttc ggctatctat ccatggcctt aaccggagct	480
ctgggtgattg ggaagactcc attctgtttg tacaatccac tggttaaccc cgacgatcat	540
ttctatctgg ccactgccat tgaatcggtc accatggctg gcattattct ggccaatctc	600

attttggacg tatatcccat catatatgtg gtcgttctgc ggatccacat ggagctcttg 660
 agtgagcgaa tcaagacgct gcgtactgat gtggaaaaag gcgacgatca acattatgcc 720
 gagctggtgg agtgtgtaaa ggatcacaaag ctaattgtcg aatatggaaa cactctgcgt 780
 cccatgatat ccgccacgat gtccatccaa ctactatccg ttggettact tttgggtctg 840
 gcagcgggtgt ccattgcagtt ctataacacc gtaatggagc gtgttgctctc cgggggtctac 900
 accatagcca ttctatccca gacctttcca ttttgctatg tctgtgagca gctgagcagc 960
 gattgcgaat ccctgaccaa cacactgttc cattccaagt ggattggagc tgagcgacga 1020
 tacagaacca cgatgttgta cttcattcac aatgttcagc agtcgatttt gttcactgcg 1080
 ggcggaattt tccccatatg tctaaacacc aatataaaga tggccaagtt cgctttctca 1140
 gtggtgacca ttgtaaatga gatggacttg gccgagaaat tgagaaggga g 1191

<210> 68
 <211> 397
 <212> PRT
 <213> Drosophila Melanogaster DOR31

<400> 68

Met	Ile	Phe	Lys	Tyr	Ile	Gln	Glu	Pro	Val	Leu	Gly	Ser	Leu	Phe	Arg
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		20					25						30		
Trp	Arg	Leu	Pro	Pro	Arg	Thr	Lys	Pro	Tyr	Trp	Trp	Leu	Tyr	Tyr	Ile
		35					40					45			
Trp	Thr	Leu	Val	Val	Ile	Val	Leu	Val	Phe	Ile	Phe	Ile	Pro	Tyr	Gly
	50				55						60				
Leu	Ile	Met	Thr	Gly	Ile	Lys	Glu	Phe	Lys	Asn	Phe	Thr	Thr	Thr	Asp
65				70					75						80
Leu	Phe	Thr	Tyr	Val	Gln	Val	Pro	Val	Asn	Thr	Asn	Ala	Ser	Ile	Met
			85						90					95	
Lys	Gly	Ile	Ile	Val	Leu	Phe	Met	Arg	Arg	Arg	Phe	Ser	Arg	Ala	Gln
			100				105						110		
Lys	Met	Met	Asp	Ala	Met	Asp	Ile	Arg	Cys	Thr	Lys	Met	Glu	Glu	Lys
	115					120					125				
Val	Gln	Val	His	Arg	Ala	Ala	Ala	Leu	Cys	Asn	Arg	Val	Val	Val	Ile
	130				135					140					

Tyr His Cys Ile Tyr Phe Gly Tyr Leu Ser Met Ala Leu Thr Gly Ala
 145 150 155 160
 Leu Val Ile Gly Lys Thr Pro Phe Cys Leu Tyr Asn Pro Leu Val Asn
 165 170 175
 Pro Asp Asp His Phe Tyr Leu Ala Thr Ala Ile Glu Ser Val Thr Met
 180 185 190
 Ala Gly Ile Ile Leu Ala Asn Leu Ile Leu Asp Val Tyr Pro Ile Ile
 195 200 205
 Tyr Val Val Val Leu Arg Ile His Met Glu Leu Leu Ser Glu Arg Ile
 210 215 220
 Lys Thr Leu Arg Thr Asp Val Glu Lys Gly Asp Asp Gln His Tyr Ala
 225 230 235 240
 Glu Leu Val Glu Cys Val Lys Asp His Lys Leu Ile Val Glu Tyr Gly
 245 250 255
 Asn Thr Leu Arg Pro Met Ile Ser Ala Thr Met Phe Ile Gln Leu Leu
 260 265 270
 Ser Val Gly Leu Leu Leu Gly Leu Ala Ala Val Ser Met Gln Phe Tyr
 275 280 285
 Asn Thr Val Met Glu Arg Val Val Ser Gly Val Tyr Thr Ile Ala Ile
 290 295 300
 Leu Ser Gln Thr Phe Pro Phe Cys Tyr Val Cys Glu Gln Leu Ser Ser
 305 310 315 320
 Asp Cys Glu Ser Leu Thr Asn Thr Leu Phe His Ser Lys Trp Ile Gly
 325 330 335
 Ala Glu Arg Arg Tyr Arg Thr Thr Met Leu Tyr Phe Ile His Asn Val
 340 345 350
 Gln Gln Ser Ile Leu Phe Thr Ala Gly Gly Ile Phe Pro Ile Cys Leu
 355 360 365
 Asn Thr Asn Ile Lys Met Ala Lys Phe Ala Phe Ser Val Val Thr Ile
 370 375 380
 Val Asn Glu Met Asp Leu Ala Glu Lys Leu Arg Arg Glu
 385 390 395

<210> 69
 <211> 1176
 <212> DNA
 <213> Drosophila Melanogaster DOR32
 <400> 69

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 atatatcggt tctctgtct cgccagccat ggggtctgtg taggagtcac ggtatttctg 180
 atgggtggagg caaagaccat tgacaatgtt tcgctgatca tgcggtagtc cactctggtc 240
 acctatatca tcaactcgga tacgaaattc gcaactgtct taaaaaggag tgcaattcaa 300
 agtctaaact caaaactggc cgaactatat ccgaagacca cgctggacag gatctatcac 360
 cgggtgaatg atcactattg gaccaagtca tttgtatatt tggttattat ctacattggg 420
 tcgctgatta tggttgttat tggaccgatt attacgtcga ttatagctta cttcacgcac 480
 aacgttttca cctacatgca ctgctatccg tactttttgt atgatcctga gaaggatccg 540
 gtttggatct acatcagcat ctatgctctg gaatggttgc acagcacaca gatggtcatt 600
 tcgaacattg gcgcgatat ctggctgtcg tactttcagg tgcagataaa tctccacttc 660
 aggggcatta tacgatcact ggcggtacac aagcccagtg tgaagcacga ccaggaggac 720
 aggaaattca ttgcgaaaat tgtcgacaag caggtgcacc tggtcagttt gcaaaacgat 780
 ctgaatggta tctttggaaa atcgtctgct ctaagcctgc tgaccaccgc agcggttatc 840
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 atcttcatcg ggacttctgt gatgcaggtc tacctgggtg gctattacgg tcagcaagtt 960
 ctgcacttga gcggcgagggt ggcccacgcc gtgtacaatc atgattttca cgatgcttct 1020
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 aatgccattg gctacctgtc catttcgtcg gacaccttta aacagctgat gagcgtctcc 1140
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<210> 70
 <211> 392
 <212> PRT
 <213> Drosophila Melanogaster DOR32

<400> 70

Met Glu Pro Val Gln Tyr Ser Tyr Glu Asp Phe Ala Arg Leu Pro Thr
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Thr Val Phe Trp Ile Met Gly Tyr Asp Met Leu Gly Val Pro Lys Thr
 20 25 30

Arg Ser Arg Arg Ile Leu Tyr Trp Ile Tyr Arg Phe Leu Cys Leu Ala

35					40					45					
Ser	His	Gly	Val	Cys	Val	Gly	Val	Met	Val	Phe	Arg	Met	Val	Glu	Ala
50						55				60					
Lys	Thr	Ile	Asp	Asn	Val	Ser	Leu	Ile	Met	Arg	Tyr	Ala	Thr	Leu	Val
65					70					75					80
Thr	Tyr	Ile	Ile	Asn	Ser	Asp	Thr	Lys	Phe	Ala	Thr	Val	Leu	Gln	Arg
				85					90					95	
Ser	Ala	Ile	Gln	Ser	Leu	Asn	Ser	Lys	Leu	Ala	Glu	Leu	Tyr	Pro	Lys
			100					105					110		
Thr	Thr	Leu	Asp	Arg	Ile	Tyr	His	Arg	Val	Asn	Asp	His	Tyr	Trp	Thr
		115					120					125			
Lys	Ser	Phe	Val	Tyr	Leu	Val	Ile	Ile	Tyr	Ile	Gly	Ser	Ser	Ile	Met
	130					135					140				
Val	Val	Ile	Gly	Pro	Ile	Ile	Thr	Ser	Ile	Ile	Ala	Tyr	Phe	Thr	His
145						150					155				160
Asn	Val	Phe	Thr	Tyr	Met	His	Cys	Tyr	Pro	Tyr	Phe	Leu	Tyr	Asp	Pro
				165					170					175	
Glu	Lys	Asp	Pro	Val	Trp	Ile	Tyr	Ile	Ser	Ile	Tyr	Ala	Leu	Glu	Trp
			180					185					190		
Leu	His	Ser	Thr	Gln	Met	Val	Ile	Ser	Asn	Ile	Gly	Ala	Asp	Ile	Trp
		195					200					205			
Leu	Leu	Tyr	Phe	Gln	Val	Gln	Ile	Asn	Leu	His	Phe	Arg	Gly	Ile	Ile
	210					215						220			
Arg	Ser	Leu	Ala	Asp	His	Lys	Pro	Ser	Val	Lys	His	Asp	Gln	Glu	Asp
225						230					235				240
Arg	Lys	Phe	Ile	Ala	Lys	Ile	Val	Asp	Lys	Gln	Val	His	Leu	Val	Ser
				245					250					255	
Leu	Gln	Asn	Asp	Leu	Asn	Gly	Ile	Phe	Gly	Lys	Ser	Leu	Leu	Leu	Ser
			260					265					270		
Leu	Leu	Thr	Thr	Ala	Ala	Val	Ile	Cys	Thr	Val	Ala	Val	Tyr	Thr	Leu
		275					280					285			
Ile	Gln	Gly	Pro	Thr	Leu	Glu	Gly	Phe	Thr	Tyr	Val	Ile	Phe	Ile	Gly
	290					295					300				
Thr	Ser	Val	Met	Gln	Val	Tyr	Leu	Val	Cys	Tyr	Tyr	Gly	Gln	Gln	Val
305						310					315				320
Leu	Asp	Leu	Ser	Gly	Glu	Val	Ala	His	Ala	Val	Tyr	Asn	His	Asp	Phe
				325				330						335	

His Asp Ala Ser Ile Ala Tyr Lys Arg Tyr Leu Leu Ile Ile Ile Ile
340 345 350

Arg Ala Gln Gln Pro Val Glu Leu Asn Ala Met Gly Tyr Leu Ser Ile
355 360 365

Ser Leu Asp Thr Phe Lys Gln Leu Met Ser Val Ser Tyr Arg Val Ile
370 375 380

Thr Met Leu Met Gln Met Ile Gln
385 390

<210> 71
<211> 795
<212> DNA
<213> Drosophila Melanogaster DOR38

<400> 71
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accgectaca tcgtgtgggc gtggtacgtc attgcatctg tgggcataac aatcagctat 180
cagacggcct ttttctgaa caacctttcg gacattatta tcaccacgga aaattgttgc 240
accaccttta tgggtgtcct gaactttgtc cgactcatcc atcttcgcct caatcagagg 300
aaattccgcc agcttattga gaacttttcc tacgaaattt ggatacctaa ttcttccaaa 360
aacaatgttg ccgccgagtg tcgcagacgc atgggttacct tcagcataat gacatccttg 420
ctagcgtgcc tgatcataat gtattgtgtc ctgccgctgg tggagatctt ctttggaacc 480
gccttcgatg cacagaacaa gccgtttccc tacaagatga tctttccgta cgatgcccgag 540
agcagttgga tccgatatgt gatgacctac atcttcacct cctacgcggg aatctgtgtg 600
gtcaccacct tgtttgcaga ggacaccatt cttggcttct tcataaccta cacttgtggc 660
caatttcatt tgctacacca acgaatcgca ggtttatttg cgggttccaa tgcggaattg 720
gccgagagca ttcagctgga gcgactcaaa cgtattgtgg aaaaacacaa caatattatc 780
agcgcaaatt ctgta 795

<210> 72
<211> 265
<212> PRT
<213> Drosophila Melanogaster DOR38

<400> 72

Met Arg Leu Ile Lys Ile Ser Tyr Ser Ala Leu Asn Glu Val Cys Val
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 Trp Leu Lys Leu Asn Gly Ser Trp Pro Leu Thr Glu Ser Ser Arg Pro
 20 25 30
 Trp Arg Ser Gln Ser Leu Leu Ala Thr Ala Tyr Ile Val Trp Ala Trp
 35 40 45
 Tyr Val Ile Ala Ser Val Gly Ile Thr Ile Ser Tyr Gln Thr Ala Phe
 50 55 60
 Leu Leu Asn Asn Leu Ser Asp Ile Ile Ile Thr Thr Glu Asn Cys Cys
 65 70 75 80
 Thr Thr Phe Met Gly Val Leu Asn Phe Val Arg Leu Ile His Leu Arg
 85 90 95
 Leu Asn Gln Arg Lys Phe Arg Gln Leu Ile Glu Asn Phe Ser Tyr Glu
 100 105 110
 Ile Trp Ile Pro Asn Ser Ser Lys Asn Asn Val Ala Ala Glu Cys Arg
 115 120 125
 Arg Arg Met Val Thr Phe Ser Ile Met Thr Ser Leu Leu Ala Cys Leu
 130 135 140
 Ile Ile Met Tyr Cys Val Leu Pro Leu Val Glu Ile Phe Phe Gly Pro
 145 150 155 160
 Ala Phe Asp Ala Gln Asn Lys Pro Phe Pro Tyr Lys Met Ile Phe Pro
 165 170 175
 Tyr Asp Ala Gln Ser Ser Trp Ile Arg Tyr Val Met Thr Tyr Ile Phe
 180 185 190
 Thr Ser Tyr Ala Gly Ile Cys Val Val Thr Thr Leu Phe Ala Glu Asp
 195 200 205
 Thr Ile Leu Gly Phe Phe Ile Thr Tyr Thr Cys Gly Gln Phe His Leu
 210 215 220
 Leu His Gln Arg Ile Ala Gly Leu Phe Ala Gly Ser Asn Ala Glu Leu
 225 230 235 240
 Ala Glu Ser Ile Gln Leu Glu Arg Leu Lys Arg Ile Val Glu Lys His
 245 250 255
 Asn Asn Ile Ile Ser Ala Asn Ser Val
 260 265
 <210> 73
 <211> 1409
 <212> DNA
 <213> Drosophila Melanogaster DOR48

<400> 73
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tacggctggt atgcagaggc ttactatggc atacactata taccgattaa catagccact 180
gcattggatg cccctttgtcc tgtggcctcc agcattttgt cgctggtgaa aatggtcgcc 240
at ttggtggt atcaagatga attaaggagt ttgatagagc gggtaagatt tttaacagag 300
caacagaagt ccaagaggaa actgggctat aagaagaggt tctatacact ggcaacgcaa 360
ctaacattcc tgctactatg ctgtggattt tgcaccagta cttcctattc cgtcagacat 420
ttgattgata atatcctgag acgcacccat ggcaaggact ggatctacga gactccgttc 480
aagatgatgt aaggaaaggg aagaatggtt tatatatact tttggaacga aataatgatg 540
tgatctaaac aagatgcact tttttttagg ttccccgata tctcctgcg tttgccactc 600
tateccatca cctatatact cgtgcattgg catggctaca ttactgtggt ttgttttgtc 660
ggcgcggtatg gtttcttcct ggggttctgt ttgtacttca ctgttttget gctctgtctg 720
caggacgatg tttgtgattt actagaggtt gaaaacatcg agaagagtcc ctccgaagcg 780
gaggaagctc gcatagtctg ggaaatggaa aaactgggtg accggcataa cgagggtggc 840
gagctgacag aaagattgtc ggggtgtatg gtggaataa cactggccca ctttgttact 900
tcgagtttga taatcggaac cagcgtgggt gatattttat tagtgggtat ttacatttga 960
ttagatcctt tcgatatatg ttcttaaatt ctagttttcc ggctgggaa tcattgtgta 1020
tgtggtctac acttggtcgc taggtgtgga aatattttcta tactgtttag gaggatctca 1080
tattatggaa gcggtatatc cataagaaac tactataaag ttacttttaa attcattgca 1140
tttcttagtg ttccaatcta gcgcgtccca cattttccag ccaactggtat ggccacagtg 1200
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aaattccttt cttttcccca tcattagaga ctctaacttc ggtaagctta tgcgaaaatg 1320
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ctctgattgc cctggcaaag tcggttata 1409

<210> 74
<211> 369
<212> PRT
<213> Drosophila Melanogaster DOR48

Met 1	Glu	Arg	His 5	Tyr	Phe	Met	Val	Pro 10	Lys	Phe	Ala	Leu	Ser	Leu 15	Ile
Gly	Phe	Tyr 20	Pro	Glu	Gln	Lys	Arg	Thr 25	Val	Leu	Val	Lys	Leu 30	Trp	Ser
Phe	Phe 35	Asn	Phe	Phe	Ile	Leu	Thr 40	Tyr	Gly	Cys	Tyr	Ala 45	Glu	Ala	Tyr
Tyr 50	Gly	Ile	His	Tyr	Ile	Pro 55	Ile	Asn	Ile	Ala	Thr 60	Ala	Leu	Asp	Ala
Leu 65	Cys	Pro	Val	Ala	Ser 70	Ser	Ile	Leu	Ser	Leu 75	Val	Lys	Met	Val	Ala 80
Ile	Trp	Trp	Tyr	Gln 85	Asp	Glu	Leu	Arg	Ser 90	Leu	Ile	Glu	Arg	Arg 95	Phe
Tyr	Thr	Leu 100	Ala	Thr	Gln	Leu	Thr	Phe 105	Leu	Leu	Leu	Cys	Cys 110	Gly	Phe
Cys	Thr 115	Ser	Thr	Ser	Tyr	Ser	Val 120	Arg	His	Leu	Ile	Asp 125	Asn	Ile	Leu
Arg 130	Arg	Thr	His	Gly	Lys	Asp 135	Trp	Ile	Tyr	Glu	Thr 140	Pro	Phe	Lys	Met
Met 145	Phe	Pro	Asp	Leu	Leu 150	Leu	Arg	Leu	Pro	Leu 155	Tyr	Pro	Ile	Thr	Tyr 160
Ile	Leu	Val	His 165	Trp	His	Gly	Tyr	Ile	Thr 170	Val	Val	Cys	Phe	Val 175	Gly
Ala	Asp	Gly 180	Phe	Phe	Leu	Gly	Phe	Cys 185	Leu	Tyr	Phe	Thr 190	Val	Leu	Leu
Leu	Cys 195	Leu	Gln	Asp	Asp	Val	Cys 200	Asp	Leu	Leu	Glu 205	Val	Glu	Asn	Ile
Glu 210	Lys	Ser	Pro	Ser	Glu	Ala 215	Glu	Glu	Ala	Arg	Ile 220	Val	Arg	Glu	Met
Glu 225	Lys	Leu	Val	Asp	Arg 230	His	Asn	Glu	Val	Ala 235	Glu	Leu	Thr	Glu	Arg 240
Leu	Ser	Gly 245	Val	Met	Val	Glu	Ile	Thr	Leu 250	Ala	His	Phe	Val	Thr 255	Ser
Ser	Leu	Ile 260	Ile	Gly	Thr	Ser	Val	Val 265	Asp	Ile	Leu	Leu	Phe 270	Ser	Gly
Leu	Gly	Ile	Ile	Val	Tyr	Val	Val	Tyr	Thr	Cys	Ala	Val	Gly	Val	Glu

275					280					285					
Ile	Phe	Leu	Tyr	Cys	Leu	Gly	Gly	Ser	His	Ile	Met	Glu	Ala	Cys	Ser
290					295					300					
Asn	Leu	Ala	Arg	Ser	Thr	Phe	Ser	Ser	His	Trp	Tyr	Gly	His	Ser	Val
305					310					315					320
Arg	Val	Gln	Lys	Met	Thr	Leu	Leu	Met	Val	Ala	Arg	Ala	Gln	Arg	Val
				325					330					335	
Leu	Thr	Ile	Lys	Ile	Pro	Phe	Phe	Ser	Pro	Ser	Leu	Glu	Thr	Leu	Thr
			340					345					350		
Ser	Ile	Leu	Arg	Phe	Thr	Gly	Ser	Leu	Ile	Ala	Leu	Ala	Lys	Ser	Val
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Ile

<210> 75
 <211> 891
 <212> DNA
 <213> Drosophila Melanogaster DOR56

<400> 75
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 tgtactcagt atgtggatat atatctgagc accgaatcct tggactttat catcagaaat 180
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 cggtttagct acgagcggtt cattaatatt ttgaaaagct ttacattga gttgttggtg 300
 agtaccgaaa gattatctca aaaatgcata ttgcataaat gggcagttct gccatatggc 360
 atgtatttgc ccactattga tgaatacaaa tacgcatcac cttactacga gattttcttt 420
 gtgattcaag ccattatggc tccaatgggg tgttgcatgt acataccata cacaaacatg 480
 gtagtacat ttaccctttt cgccattctc atgtgtcgag tgttgcaaca taagttgaga 540
 agcctagaaa agctgaaaaa tgaacaagta cgtggtgaaa tcgctcaaac aattgctcag 600
 accgtcatag tcatcgcata catggtaatg atatttgcca acagtgtagt cttttactac 660
 gtggccaatg agctatactt tcaaagcttt gatattgcca ttgctgccta tgagagcaat 720
 tggatggact ttgatgtgga cacacaaaag actttgaagt tcctcatcat gcgctcgcaa 780
 aagcccttgg cgagtctggt ggggtggcaca tatcccatga acttgaaaat gcttcagtca 840
 ctactaaatg ccatttactc cttcttcacc cttctgcgtc gcgtttacgg c 891

<210> 76
 <211> 297
 <212> PRT
 <213> Drosophila Melanogaster DOR56

<400> 76

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Lys	Phe	Trp	Ser	Tyr	Leu	Phe	Val	His	Asn	Trp	Arg	Arg	Tyr	Val	Ala
			20					25					30		
Met	Thr	Pro	Tyr	Ile	Ile	Ile	Asn	Cys	Thr	Gln	Tyr	Val	Asp	Ile	Tyr
		35					40					45			
Leu	Ser	Thr	Glu	Ser	Leu	Asp	Phe	Ile	Ile	Arg	Asn	Val	Tyr	Leu	Ala
	50					55					60				
Val	Leu	Phe	Thr	Asn	Thr	Val	Val	Arg	Gly	Val	Leu	Leu	Cys	Val	Gln
65					70					75					80
Arg	Phe	Ser	Tyr	Glu	Arg	Phe	Ile	Asn	Ile	Leu	Lys	Ser	Phe	Tyr	Ile
				85					90					95	
Glu	Leu	Leu	Val	Ser	Thr	Glu	Arg	Leu	Ser	Gln	Lys	Cys	Ile	Leu	His
			100					105					110		
Lys	Trp	Ala	Val	Leu	Pro	Tyr	Gly	Met	Tyr	Leu	Pro	Thr	Ile	Asp	Glu
		115					120				125				
Tyr	Lys	Tyr	Ala	Ser	Pro	Tyr	Tyr	Glu	Ile	Phe	Phe	Val	Ile	Gln	Ala
	130					135					140				
Ile	Met	Ala	Pro	Met	Gly	Cys	Cys	Met	Tyr	Ile	Pro	Tyr	Thr	Asn	Met
145					150					155					160
Val	Val	Thr	Phe	Thr	Leu	Phe	Ala	Ile	Leu	Met	Cys	Arg	Val	Leu	Gln
				165					170					175	
His	Lys	Leu	Arg	Ser	Leu	Glu	Lys	Leu	Lys	Asn	Glu	Gln	Val	Arg	Gly
			180					185					190		
Glu	Ile	Ala	Gln	Thr	Ile	Ala	Gln	Thr	Val	Ile	Val	Ile	Ala	Tyr	Met
		195					200					205			
Val	Met	Ile	Phe	Ala	Asn	Ser	Val	Val	Leu	Tyr	Tyr	Val	Ala	Asn	Glu
	210					215					220				
Leu	Tyr	Phe	Gln	Ser	Phe	Asp	Ile	Ala	Ile	Ala	Ala	Tyr	Glu	Ser	Asn
225					230					235					240
Trp	Met	Asp	Phe	Asp	Val	Asp	Thr	Gln	Lys	Thr	Leu	Lys	Phe	Leu	Ile

	245		250		255	
Met Arg Ser Gln Lys Pro Leu Ala Ser Leu Val Gly Gly Thr Tyr Pro						
	260		265		270	
Met Asn Leu Lys Met Leu Gln Ser Leu Leu Asn Ala Ile Tyr Ser Phe						
	275		280		285	
Phe Thr Leu Leu Arg Arg Val Tyr Gly						
	290		295			

<210> 77
 <211> 1134
 <212> DNA
 <213> Drosophila Melanogaster DOR58

<400> 77
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 atctctcaca actggcccat ggtagtctat gccctgcagg atctctccga cttgaccctg 180
 ctgacggaca actttgcggt gtttatgcaa ggatcacaga gcacctcaa gttcctggtc 240
 atgatggcga aacgaaggcg cattggatcg ttgattcacc gtttgcataa gctaaaccag 300
 gcggccagtg ccacgccc aa tcacctggag aagatcgaga gggaaaacca actggatagg 360
 tatgtcgcca ggtcctttag aaatgccgc tacggagtga tttgtgcctc ggccatagcg 420
 cccatgttgc ttggcctgtg gggatatgtg gagacgggtg tatttacccc caccacaccc 480
 atggagttca acttctggct ggacgagcga aagcctcact tttattggcc catctacgtt 540
 tggggcgtag tgggcgtggc agctgccgc tggttggcca ttgcaacgga caccctgttc 600
 tcctggctga ctcaaatgt ggtgattcag ttccaactac tggagcttgt tctcgaagag 660
 aaggatctga atggcggaga ctctcgctg accgggtttg ttagtcgtca tcgtatagct 720
 ctggatttgg ccaaggaact aagttcgatt ttcggggaga tcgtctttgt gaaatacatg 780
 ctcagttacc tgcaactctg catgttggcc ttctgcttca gccgcagtg ctggagtgcc 840
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 tatggaggcg agtatataaa gcagcaaagt ttggccatcg cacaagccgt ttatggtcaa 960
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<210> 78
 <211> 378
 <212> PRT
 <213> Drosophila Melanogaster DOR58

<400> 78

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			20					25					30		
Ala	Gly	Ile	Leu	Ile	Leu	Ser	Leu	Ile	Ser	His	Asn	Trp	Pro	Met	Val
		35					40					45			
Val	Tyr	Ala	Leu	Gln	Asp	Leu	Ser	Asp	Leu	Thr	Arg	Leu	Thr	Asp	Asn
	50					55					60				
Phe	Ala	Val	Phe	Met	Gln	Gly	Ser	Gln	Ser	Thr	Phe	Lys	Phe	Leu	Val
65					70					75					80
Met	Met	Ala	Lys	Arg	Arg	Arg	Ile	Gly	Ser	Leu	Ile	His	Arg	Leu	His
				85					90					95	
Lys	Leu	Asn	Gln	Ala	Ala	Ser	Ala	Thr	Pro	Asn	His	Leu	Glu	Lys	Ile
			100					105						110	
Glu	Arg	Glu	Asn	Gln	Leu	Asp	Arg	Tyr	Val	Ala	Arg	Ser	Phe	Arg	Asn
		115					120					125			
Ala	Ala	Tyr	Gly	Val	Ile	Cys	Ala	Ser	Ala	Ile	Ala	Pro	Met	Leu	Leu
		130				135						140			
Gly	Leu	Trp	Gly	Tyr	Val	Glu	Thr	Gly	Val	Phe	Thr	Pro	Thr	Thr	Pro
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Met	Glu	Phe	Asn	Phe	Trp	Leu	Asp	Glu	Arg	Lys	Pro	His	Phe	Tyr	Trp
			165						170					175	
Pro	Ile	Tyr	Val	Trp	Gly	Val	Leu	Gly	Val	Ala	Ala	Ala	Ala	Trp	Leu
			180					185						190	
Ala	Ile	Ala	Thr	Asp	Thr	Leu	Phe	Ser	Trp	Leu	Thr	His	Asn	Val	Val
		195					200					205			
Ile	Gln	Phe	Gln	Leu	Leu	Glu	Leu	Val	Leu	Glu	Glu	Lys	Asp	Leu	Asn
		210				215						220			
Gly	Gly	Asp	Ser	Arg	Leu	Thr	Gly	Phe	Val	Ser	Arg	His	Arg	Ile	Ala
225					230					235					240
Leu	Asp	Leu	Ala	Lys	Glu	Leu	Ser	Ser	Ile	Phe	Gly	Glu	Ile	Val	Phe
				245					250					255	

Val Lys Tyr Met Leu Ser Tyr Leu Gln Leu Cys Met Leu Ala Phe Arg
 260 265 270
 Phe Ser Arg Ser Gly Trp Ser Ala Gln Val Pro Phe Arg Ala Thr Phe
 275 280 285
 Leu Val Ala Ile Ile Ile Gln Leu Ser Ser Tyr Cys Tyr Gly Gly Glu
 290 295 300
 Tyr Ile Lys Gln Gln Ser Leu Ala Ile Ala Gln Ala Val Tyr Gly Gln
 305 310 315 320
 Ile Asn Trp Pro Glu Met Thr Pro Lys Lys Arg Arg Leu Trp Gln Met
 325 330 335
 Val Ile Met Arg Ala Gln Arg Pro Ala Lys Ile Phe Gly Phe Met Phe
 340 345 350
 Val Val Asp Leu Pro Leu Leu Leu Trp Val Ile Arg Thr Ala Gly Ser
 355 360 365
 Phe Leu Ala Met Leu Arg Thr Phe Glu Arg
 370 375

<210> 79

<211> 807

<212> DNA

<213> Drosophila Melanogaster DOR59

<400> 79

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tgcattctaca ggagtctgtt tctgccgaaa tcggttttca atgtgccagc tgtgcgacgt	180
ggtgaggagc atcccattct gctatttcag ctgtttccct tcggagaact ttgcgataac	240
ttcggtgttg gatacttggg accttggtat gctctggggc tgggaatcac ggctatccca	300
ttgtggcaca cctttatcac ttgcctcatg aagtacgtaa atctcaagct gcaaatactc	360
aacaagcgag tggaggagat ggatattacc cgacttaatt ccaaattggt aattggtcgc	420
ctaactgcc a gtgagttaac cttctggcaa atgcaactct tcaaggaatt tgtaaaggaa	480
cagctgagga ttcgaaaatt tgtccaggaa ctacagtatc tgatttgcgt gcctgtgatg	540
gcagatttca ttatcttctc ggttctcatt tgctttctct tttttgcctt gacagttggc	600
cacgatgaac tgagccttgc ttacttttct tcgggatggt acaacttcga aatgcctttg	660
cagaaaatgc tgggttttat gatgatgcat gcccaaaggc cgatgaagat gcgcgcctg	720

ctggctcgatt tgaatctgag gaccttcata gacattggcc gtggagccta cagctacttc 780
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<210> 80
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<212> PRT
<213> Drosophila Melanogaster DOR59
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<400> 80

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Ala	Tyr	Thr	Arg	Thr	Ile	Thr	Leu	Leu	Ile	Trp	Ile	Pro	Ser	Val	Ile	
			20					25					30			
Ala	Gly	Leu	Met	Ala	Tyr	Ser	Asp	Cys	Ile	Tyr	Arg	Ser	Leu	Phe	Leu	
		35					40					45				
Pro	Lys	Ser	Val	Phe	Asn	Val	Pro	Ala	Val	Arg	Arg	Gly	Glu	Glu	His	
	50					55					60					
Pro	Ile	Leu	Leu	Phe	Gln	Leu	Phe	Pro	Phe	Gly	Glu	Leu	Cys	Asp	Asn	
65					70					75					80	
Phe	Val	Val	Gly	Tyr	Leu	Gly	Pro	Trp	Tyr	Ala	Leu	Gly	Leu	Gly	Ile	
				85					90					95		
Thr	Ala	Ile	Pro	Leu	Trp	His	Thr	Phe	Ile	Thr	Cys	Leu	Met	Lys	Tyr	
			100					105					110			
Val	Asn	Leu	Lys	Leu	Gln	Ile	Leu	Asn	Lys	Arg	Val	Glu	Glu	Met	Asp	
		115					120					125				
Ile	Thr	Arg	Leu	Asn	Ser	Lys	Leu	Val	Ile	Gly	Arg	Leu	Thr	Ala	Ser	
	130					135					140					
Glu	Leu	Thr	Phe	Trp	Gln	Met	Gln	Leu	Phe	Lys	Glu	Phe	Val	Lys	Glu	
145					150					155					160	
Gln	Leu	Arg	Ile	Arg	Lys	Phe	Val	Gln	Glu	Leu	Gln	Tyr	Leu	Ile	Cys	
				165					170					175		
Val	Pro	Val	Met	Ala	Asp	Phe	Ile	Ile	Phe	Ser	Val	Leu	Ile	Cys	Phe	
			180					185					190			
Leu	Phe	Phe	Ala	Leu	Thr	Val	Gly	His	Asp	Glu	Leu	Ser	Leu	Ala	Tyr	
		195					200					205				
Phe	Ser	Cys	Gly	Trp	Tyr	Asn	Phe	Glu	Met	Pro	Leu	Gln	Lys	Met	Leu	
	210					215					220					
Val	Phe	Met	Met	Met	His	Ala	Gln	Arg	Pro	Met	Lys	Met	Arg	Ala	Leu	

225	230	235	240
Leu Val Asp	Leu Asn Leu Arg Thr Phe Ile Asp Ile Gly Arg Gly Ala		
	245	250	255
Tyr Ser Tyr	Phe Asn Leu Leu Arg Ser Ser His Leu Tyr		
	260	265	

<210> 81
 <211> 1143
 <212> DNA
 <213> Drosophila Melanogaster DOR68

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 tattgtatta tgtgtctgac aacaagcttt gagctctgca ccggtgctgc ctttatggtc 180
 caaaatcgca accaaatcgt gctttgttcc gaggcctga tgcacggact acagatggtc 240
 tcctcgctac tgaagatggc tatattcttg gccaaatctc acgacctggt ggacctaat 300
 caacagattc agtcgccttt tacagaggag gatctttag gtacagagt gagatccaa 360
 aatcaaagg gacaactaat ggctgccatt tactttatga tgtgtgccg tacgagtgtg 420
 tcatttctgt tgatgccagt ggctttgacc atgcttaagt accattccac tggggaattc 480
 gcgcctgtca gctcgttcgc ggttctgctt ccatacgatg tgacacaacc gcatgtttat 540
 gccatggact gctgcttgat ggtatttggt ttaagttttt ttgctgctc caccaccgga 600
 gtggatacct tatatggatg gtgtgcttta ggctgaggt tacaataccg tcgcctcggt 660
 caacaactta aaaggatacc ctctgtttc aatccatctc ggtctgactt tggattaagt 720
 gggatttttg tggagcatgc tcgtctgctt aaaatagtcc aacattttta ttatagtttt 780
 atggagatcg catttggtga ggttggtata atctgtggac tctattgctc agtaatttgt 840
 cagtataaa tgccacacac caacaaaac ttcgccttcc tgggtttctt ttcatttgta 900
 gttaccacac agctgtgcat ctatcttttc ggtgccgaac aggtccggtt ggaggtgag 960
 cgattttccc ggtcgtctata cgaagtaatt ccttggcaaa accttctctc taaacaccgg 1020
 aaacttttcc tttttccaat tgagcgcgcc caacgagaaa ctgttctcgg tgcttatttc 1080
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 ttt 1143

<210> 82
 <211> 381
 <212> PRT
 <213> Drosophila Melanogaster DOR68

<400> 82

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Phe Thr Phe Ala Arg Met Gly Leu Asp Leu Gln Pro Asp Lys Lys Gly
           20           25           30

Asn Val Leu Arg Ser Pro Leu Leu Tyr Cys Ile Met Cys Leu Thr Thr
           35           40           45

Ser Phe Glu Leu Cys Thr Val Cys Ala Phe Met Val Gln Asn Arg Asn
           50           55           60

Gln Ile Val Leu Cys Ser Glu Ala Leu Met His Gly Leu Gln Met Val
65           70           75           80

Ser Ser Leu Leu Lys Met Ala Ile Phe Leu Ala Lys Ser His Asp Leu
           85           90           95

Val Asp Leu Ile Gln Gln Ile Gln Ser Pro Phe Thr Glu Glu Asp Leu
           100          105          110

Val Gly Thr Glu Trp Arg Ser Gln Asn Gln Arg Gly Gln Leu Met Ala
           115          120          125

Ala Ile Tyr Phe Met Met Cys Ala Gly Thr Ser Val Ser Phe Leu Leu
           130          135          140

Met Pro Val Ala Leu Thr Met Leu Lys Tyr His Ser Thr Gly Glu Phe
145          150          155          160

Ala Pro Val Ser Ser Phe Arg Val Leu Leu Pro Tyr Asp Val Thr Gln
           165          170          175

Pro His Val Tyr Ala Met Asp Cys Cys Leu Met Val Phe Val Leu Ser
           180          185          190

Phe Phe Cys Cys Ser Thr Thr Gly Val Asp Thr Leu Tyr Gly Trp Cys
           195          200          205

Ala Leu Gly Val Ser Leu Gln Tyr Arg Arg Leu Gly Gln Gln Leu Lys
           210          215          220

Arg Ile Pro Ser Cys Phe Asn Pro Ser Arg Ser Asp Phe Gly Leu Ser
225          230          235          240

Gly Ile Phe Val Glu His Ala Arg Leu Leu Lys Ile Val Gln His Phe
           245          250          255

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Asn Tyr Ser Phe Met Glu Ile Ala Phe Val Glu Val Val Ile Ile Cys
 260 265 270
 Gly Leu Tyr Cys Ser Val Ile Cys Gln Tyr Ile Met Pro His Thr Asn
 275 280 285
 Gln Asn Phe Ala Phe Leu Gly Phe Phe Ser Leu Val Val Thr Thr Gln
 290 295 300
 Leu Cys Ile Tyr Leu Phe Gly Ala Glu Gln Val Arg Leu Glu Ala Glu
 305 310 315 320
 Arg Phe Ser Arg Leu Leu Tyr Glu Val Ile Pro Trp Gln Asn Leu Pro
 325 330 335
 Pro Lys His Arg Lys Leu Phe Leu Phe Pro Ile Glu Arg Ala Gln Arg
 340 345 350
 Glu Thr Val Leu Gly Ala Tyr Phe Phe Glu Leu Gly Arg Pro Leu Leu
 355 360 365
 Val Trp Val Ser Ile Phe Leu Phe Ile Val Leu Leu Phe
 370 375 380

<210> 83
 <211> 927
 <212> DNA
 <213> Drosophila Melanogaster DOR77

<400> 83
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 ataaatttta atctgttggg aatcggtgaa ctgggtgttct tctacaactc aattcaggac 180
 tttgaaacca ttcgattggc catcgcggtg gctccatgta tcggattttc tctggttgct 240
 gatttttaaac aagctgccat gattagaggc aagaaaacac taattatgct actcgatgat 300
 ttggagaaca tgcattccgaa aaccctggca aagcaaattg aatacaaatt gccggacttt 360
 gaaaagacca tgaaacgtgt gatcaatata ttcacctttc tctgcttggc ctatacgact 420
 acgtttctcct tttatccggc catcaaggca tccgtgaaat ttaatttctt gggctacgac 480
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 ttgatatact ggatcatgta ctgggacata gcccatgggg cctatctagc ggcctttcag 600
 gtcaccgaat caacagtgga agtgattatt atttactgca tttttttgat gacctcgatg 660
 gttcaggat ttatgggtgtg ctactatggg gatactttaa ttgccgcgag cttgaaagtg 720
 ggcgatgccg cttacaacca aaagtgtttt cagtgcagca aatcctattg caccatgttg 780

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atatccttgg ttacctatat gaagaatccc ttcaacaatc tacccaaaca cagctcttcc 900
ctqcaaatca acqccaatcg ctatatc 927
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Asp	Ile	Tyr	Ala 20	His	Arg	Ser	Thr	Asn 25	Pro	Leu	Lys	Ser	Leu 30	Leu	Phe
Lys	Ile	Tyr 35	Leu	Tyr	Ala	Gly	Phe 40	Ile	Asn	Phe	Asn 45	Leu	Leu	Val	Ile
Gly 50	Glu	Leu	Val	Phe	Phe	Tyr 55	Asn	Ser	Ile	Gln	Asp 60	Phe	Glu	Thr	Ile
Arg 65	Leu	Ala	Ile	Ala	Val 70	Ala	Pro	Cys	Ile	Gly 75	Phe	Ser	Leu	Val	Ala 80
Asp	Phe	Lys	Gln 85	Ala	Ala	Met	Ile	Arg	Gly 90	Lys	Lys	Thr	Leu	Ile 95	Met
Leu	Leu	Asp	Asp 100	Leu	Glu	Asn	Met	His 105	Pro	Lys	Thr	Leu	Ala 110	Lys	Gln
Met	Glu	Tyr 115	Lys	Leu	Pro	Asp	Phe 120	Glu	Lys	Thr	Met	Lys 125	Arg	Val	Ile
Asn 130	Ile	Phe	Thr	Phe	Leu	Cys 135	Leu	Ala	Tyr	Thr	Thr 140	Thr	Phe	Ser	Phe
Tyr 145	Pro	Ala	Ile	Lys	Ala 150	Ser	Val	Lys	Phe	Asn 155	Phe	Leu	Gly	Tyr	Asp 160
Thr	Phe	Asp	Arg	Asn 165	Phe	Gly	Phe	Leu	Ile 170	Trp	Phe	Pro	Phe	Asp 175	Ala
Thr	Arg	Asn 180	Asn	Leu	Ile	Tyr	Trp 185	Ile	Met	Tyr	Trp	Asp 190	Ile	Ala	His
Gly	Ala	Tyr 195	Leu	Ala	Ala	Phe	Gln 200	Val	Thr	Glu	Ser 205	Thr	Val	Glu	Val
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210		215		220
Met Val Cys Tyr Tyr Gly Asp Thr Leu Ile Ala Ala Ser Leu Lys Val				
225		230	235	240
Gly Asp Ala Ala Tyr Asn Gln Lys Trp Phe Gln Cys Ser Lys Ser Tyr				
	245		250	255
Cys Thr Met Leu Lys Leu Leu Ile Met Arg Ser Gln Lys Pro Ala Ser				
	260	265		270
Ile Arg Pro Pro Thr Phe Pro Pro Ile Ser Leu Val Thr Tyr Met Lys				
	275	280		285
Asn Pro Phe Asn Asn Leu Pro Lys His Ser Ser Ser Leu Gln Ile Asn				
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<210> 85
 <211> 1152
 <212> DNA
 <213> Drosophila Melanogaster DOR78

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ggaaagtcca ttgatgccgt cactgtactg tcatatatcg gattcgtaat cgtgggcatg	240
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<210> 86
<211> 384
<212> PRT
<213> Drosophila Melanogaster DOR78

<400> 86

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Glu	Pro	Tyr	Thr	Ile	Asp	Ser	Arg	Ser	Lys	Lys	Ala	Ser	Leu	Trp	Ser	
			20					25					30			
His	Leu	Leu	Phe	Trp	Ala	Asn	Val	Ile	Asn	Leu	Ser	Val	Ile	Val	Phe	
			35				40					45				
Gly	Glu	Ile	Leu	Tyr	Leu	Gly	Val	Ala	Tyr	Ser	Asp	Gly	Lys	Phe	Ile	
	50					55					60					
Asp	Ala	Val	Thr	Val	Leu	Ser	Tyr	Ile	Gly	Phe	Val	Ile	Val	Gly	Met	
65					70					75					80	
Ser	Lys	Met	Phe	Phe	Ile	Trp	Trp	Lys	Lys	Thr	Asp	Leu	Ser	Asp	Leu	
				85					90					95		
Val	Lys	Glu	Leu	Glu	His	Ile	Tyr	Pro	Asn	Gly	Lys	Ala	Glu	Glu	Glu	
			100					105					110			
Met	Tyr	Arg	Leu	Asp	Arg	Tyr	Leu	Arg	Ser	Cys	Ser	Arg	Ile	Ser	Ile	
		115					120					125				
Thr	Tyr	Ala	Leu	Leu	Tyr	Ser	Val	Leu	Ile	Trp	Thr	Phe	Asn	Leu	Phe	
	130					135						140				
Ser	Ile	Met	Gln	Phe	Leu	Val	Tyr	Glu	Lys	Leu	Leu	Lys	Ile	Arg	Val	
145					150				155					160		
Val	Gly	Gln	Thr	Leu	Pro	Tyr	Leu	Met	Tyr	Phe	Pro	Trp	Asn	Trp	His	
				165				170					175			
Glu	Asn	Trp	Thr	Tyr	Tyr	Val	Leu	Leu	Phe	Cys	Gln	Asn	Phe	Ala	Gly	
			180				185						190			

His Thr Ser Ala Ser Gly Gln Ile Ser Thr Asp Leu Leu Leu Cys Ala
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 Val Ala Thr Gln Val Val Met His Phe Asp Tyr Leu Ala Arg Val Val
 210 215 220
 Glu Lys Gln Val Leu Asp Arg Asp Trp Ser Glu Asn Ser Arg Phe Leu
 225 230 235 240
 Ala Lys Thr Val Gln Tyr His Gln Arg Ile Leu Arg Leu Met Asp Val
 245 250 255
 Leu Asn Asp Ile Phe Gly Ile Pro Leu Leu Leu Asn Phe Met Val Ser
 260 265 270
 Thr Phe Val Ile Cys Phe Val Gly Phe Gln Met Thr Val Gly Val Pro
 275 280 285
 Pro Asp Ile Met Ile Lys Leu Phe Leu Phe Leu Phe Ser Ser Leu Ser
 290 295 300
 Gln Val Tyr Leu Ile Cys His Tyr Gly Gln Leu Ile Ala Asp Ala Val
 305 310 315 320
 Arg Asp Phe Arg Ser Ser Ser Leu Ser Ile Ser Ala Tyr Lys Gln Asn
 325 330 335
 Trp Gln Asn Ala Asp Ile Arg Tyr Arg Arg Ala Leu Val Phe Phe Ile
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<210> 87

<211> 1203

<212> DNA

<213> *Drosophila Melanogaster* DOR81

<400> 87

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ctgtgcctca acacttggtg ctctgcctctg aagttcttca ctctgatcgt ctatacgac	240
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 aagcgatacc agcggactgt catccagttc ctgcagaaac tgcagcagcc catgaccttc 1020
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<210> 88
 <211> 399
 <212> PRT
 <213> Drosophila Melanogaster DOR81

<400> 88

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			20					25					30		
Val	Ile	Leu	Pro	Val	Ser	Phe	Pro	Ile	Asn	Tyr	Val	Ile	His	Leu	Ala
			35				40					45			
Glu	Phe	Pro	Pro	Glu	Leu	Leu	Gln	Ser	Leu	Gln	Leu	Cys	Leu	Asn	
	50				55					60					
Thr	Trp	Cys	Phe	Ala	Leu	Lys	Phe	Phe	Thr	Leu	Ile	Val	Tyr	Thr	His
65				70					75					80	
Arg	Leu	Glu	Leu	Ala	Asn	Lys	His	Phe	Asp	Glu	Leu	Asp	Lys	Tyr	Cys
			85					90					95		

Val Lys Pro Ala Glu Lys Arg Lys Val Arg Asp Met Val Ala Thr Ile
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 Thr Arg Leu Tyr Leu Thr Phe Val Val Val Tyr Val Leu Tyr Ala Thr
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 Ser Thr Leu Leu Asp Gly Leu Leu His His Arg Val Pro Tyr Asn Thr
 130 135 140
 Tyr Tyr Pro Phe Ile Asn Trp Arg Val Asp Arg Thr Gln Met Tyr Ile
 145 150 155 160
 Gln Ser Phe Leu Glu Tyr Phe Thr Val Gly Tyr Ala Ile Tyr Val Ala
 165 170 175
 Thr Ala Thr Asp Ser Tyr Pro Val Ile Tyr Val Ala Ala Leu Arg Thr
 180 185 190
 His Ile Leu Leu Leu Lys Asp Arg Ile Ile Tyr Leu Gly Asp Pro Ser
 195 200 205
 Asn Glu Gly Ser Ser Asp Pro Ser Tyr Met Phe Lys Ser Leu Val Asp
 210 215 220
 Cys Ile Lys Ala His Arg Thr Met Leu Asn Phe Cys Asp Ala Ile Gln
 225 230 235 240
 Pro Ile Ile Ser Gly Thr Ile Phe Ala Gln Phe Ile Ile Cys Gly Ser
 245 250 255
 Ile Leu Gly Ile Ile Met Ile Asn Met Val Leu Phe Ala Asp Gln Ser
 260 265 270
 Thr Arg Phe Gly Ile Val Ile Tyr Val Met Ala Val Leu Leu Gln Thr
 275 280 285
 Phe Pro Leu Cys Phe Tyr Cys Asn Ala Ile Val Asp Asp Cys Lys Glu
 290 295 300
 Leu Ala His Ala Leu Phe His Ser Ala Trp Trp Val Gln Asp Lys Arg
 305 310 315 320
 Tyr Gln Arg Thr Val Ile Gln Phe Leu Gln Lys Leu Gln Gln Pro Met
 325 330 335
 Thr Phe Thr Ala Met Asn Ile Phe Asn Ile Asn Leu Ala Thr Asn Ile
 340 345 350
 Asn Val Ser Pro Leu Leu Ser Val Arg Thr Gly Lys Glu Ala Lys Ser
 355 360 365
 Glu Leu Gln Ser Leu Gln Val Ala Lys Phe Ala Phe Thr Val Tyr Ala
 370 375 380
 Ile Ala Ser Gly Met Asn Leu Asp Gln Lys Leu Ser Ile Lys Glu

385

390

395

<210> 89

<211> 1179

<212> DNA

<213> *Drosophila Melanogaster* DOR82

<400> 89

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gtgcttatct attggtattg caatggccgt cttgccacgg aaacggggcac ctttgtggca      180
caattatctg aaatgtgcag ttctttttgt ctaacatttg tgggattctg taacgtttat      240
gcgatctcta caaacggcaa tcaaattgaa acattactcg aggagcttca tcagatatat      300
ccgagataca ggaaaaatca ctatcgctgc cagcattatt ttgacatggc catgacaata      360
atgagaattg agtttctttt ctatatgata ttgtacgtgt actacaatag tgcaccatta      420
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aacacttggt ttccatggaa agtccatggg tcggcacttg gatttggtat ggctgtacta      540
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<210> 90

<211> 393

<212> PRT

<213> *Drosophila Melanogaster* DOR82

<400> 90

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 Cys Gln Ile Phe Gln Ile Thr Gly Val Leu Ile Tyr Trp Tyr Cys Asn
 35 40 45
 Gly Arg Leu Ala Thr Glu Thr Gly Thr Phe Val Ala Gln Leu Ser Glu
 50 55 60
 Met Cys Ser Ser Phe Cys Leu Thr Phe Val Gly Phe Cys Asn Val Tyr
 65 70 75 80
 Ala Ile Ser Thr Asn Arg Asn Gln Ile Glu Thr Leu Leu Glu Glu Leu
 85 90 95
 His Gln Ile Tyr Pro Arg Tyr Arg Lys Asn His Tyr Arg Cys Gln His
 100 105 110
 Tyr Phe Asp Met Ala Met Thr Ile Met Arg Ile Glu Phe Leu Phe Tyr
 115 120 125
 Met Ile Leu Tyr Val Tyr Tyr Asn Ser Ala Pro Leu Trp Val Leu Leu
 130 135 140
 Trp Glu His Leu His Glu Glu Tyr Asp Leu Ser Phe Lys Thr Gln Thr
 145 150 155 160
 Asn Thr Trp Phe Pro Trp Lys Val His Gly Ser Ala Leu Gly Phe Gly
 165 170 175
 Met Ala Val Leu Ser Ile Thr Val Gly Ser Phe Val Gly Val Gly Phe
 180 185 190
 Ser Ile Val Thr Gln Asn Leu Ile Cys Leu Leu Thr Phe Gln Leu Lys
 195 200 205
 Leu His Tyr Asp Gly Ile Ser Ser Gln Leu Val Ser Leu Asp Cys Arg
 210 215 220
 Arg Pro Gly Ala His Lys Glu Leu Ser Ile Leu Ile Ala His His Ser
 225 230 235 240
 Arg Ile Leu Gln Leu Gly Asp Gln Val Asn Asp Ile Met Asn Phe Val
 245 250 255
 Phe Gly Ser Ser Leu Val Gly Ala Thr Ile Ala Ile Cys Met Ser Ser
 260 265 270
 Val Ser Ile Met Leu Leu Asp Leu Ala Ser Ala Phe Lys Tyr Ala Ser
 275 280 285

Gly Leu Val Ala Phe Val Leu Tyr Asn Phe Val Ile Cys Tyr Met Gly
 290 295 300
 Thr Glu Val Thr Leu Ala Val Lys Ile Gly Ser Tyr Met Asp Gly Arg
 305 310 315 320
 Arg Trp Ile Pro Lys Asp Ser Leu Leu Arg Ser Gln Arg Leu Gln Val
 325 330 335
 Leu Val Ala Val Gly Phe Phe Asn Ile Cys Val Leu Ser Asn Arg Arg
 340 345 350
 Pro Lys Ile Glu Ile Leu Leu Arg Tyr Tyr Tyr His Ile Met Phe Tyr
 355 360 365
 Ser Phe Lys Leu Tyr Phe Ser Leu Arg Lys Gly Ser Leu Trp Lys Ile
 370 375 380
 Leu Ser Ser Phe Thr Leu Leu Arg Ile
 385 390

<210> 91

<211> 1209

<212> DNA

<213> Drosophila Melanogaster DOR83

<400> 91

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atcttctggc ttggagcagt aaatttgggt tatcacaata ttggctgcgt catgtatggc	180
tatttcggtg atggaagaac aaaggatcca attgcgtatt tagctgaatt ggcattctgtg	240
gccagcatgc ttggtttcac catttgtggc accctcaact tgtggaagat gctgagcctt	300
aagaccatt ttgagaacct actaaatgaa ttcgaggaat tatttcaact aatcaagcac	360
agggcgtatc gcatacacca ctatcaagaa aagtatacgc gtcataatcg aaatacatctt	420
attttcata cctctgccgt tgtctactac aactcactac caattcttct aatgattcgg	480
gaacatttct cgaactcaca gcagttgggc tatagaattc agagtaatac ctggtatccc	540
tggcaggttc agggatcaat tcctggattt ttgctgcag tcgcctgtca aatcttttcg	600
tgccaaacca atatgtgcgt caatatgttt atccagtttc tgatcaactt ttttggtatc	660
cagctagaaa tacacttcga tggtttggcc aggcagctgg agaccatcga tgcccgcatt	720
ccccatgcca aggatcaatt gaagtatctg attgtatatc acacaaaatt gcttaatcta	780
gccgacagag ttaatcgatc gttaacttt acgtttctca taagtctgtc ggtatccatg	840

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 cacttgattt taacgagtggt caaagtattg ccagcggcct tttataacaa ttggtatgaa 1020
 ggcgatcttg tttatcgaag gatgctcttc atcctgatga tgcgtgctac gaaaccttat 1080
 atgtggaaaa cctacaagct ggcacctgta tccataacta catatatggc agaatgcaaa 1140
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 gcacgaata 1209

<210> 92
 <211> 403
 <212> PRT
 <213> *Drosophila Melanogaster* DOR83
 <400> 92

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Ala	Gln	Leu	Pro	Arg	Tyr	Thr	Trp	Asn	Gly	Arg	Arg	Ser	Leu	Glu	Val	20	25	30	
Lys	Arg	Asn	Leu	Ala	Lys	Arg	Ile	Ile	Phe	Trp	Leu	Gly	Ala	Val	Asn	35	40	45	
Leu	Val	Tyr	His	Asn	Ile	Gly	Cys	Val	Met	Tyr	Gly	Tyr	Phe	Gly	Asp	50	55	60	
Gly	Arg	Thr	Lys	Asp	Pro	Ile	Ala	Tyr	Leu	Ala	Glu	Leu	Ala	Ser	Val	65	70	75	80
Ala	Ser	Met	Leu	Gly	Phe	Thr	Ile	Val	Gly	Thr	Leu	Asn	Leu	Trp	Lys	85	90	95	
Met	Leu	Ser	Leu	Lys	Thr	His	Phe	Glu	Asn	Leu	Leu	Asn	Glu	Phe	Glu	100	105	110	
Glu	Leu	Phe	Gln	Leu	Ile	Lys	His	Arg	Ala	Tyr	Arg	Ile	His	His	Tyr	115	120	125	
Gln	Glu	Lys	Tyr	Thr	Arg	His	Ile	Arg	Asn	Thr	Phe	Ile	Phe	His	Thr	130	135	140	
Ser	Ala	Val	Val	Tyr	Tyr	Asn	Ser	Leu	Pro	Ile	Leu	Leu	Met	Ile	Arg	145	150	155	160
Glu	His	Phe	Ser	Asn	Ser	Gln	Gln	Leu	Gly	Tyr	Arg	Ile	Gln	Ser	Asn	165	170	175	

Thr Trp Tyr Pro Trp Gln Val Gln Gly Ser Ile Pro Gly Phe Phe Ala
 180 185 190
 Ala Val Ala Cys Gln Ile Phe Ser Cys Gln Thr Asn Met Cys Val Asn
 195 200 205
 Met Phe Ile Gln Phe Leu Ile Asn Phe Phe Gly Ile Gln Leu Glu Ile
 210 215 220
 His Phe Asp Gly Leu Ala Arg Gln Leu Glu Thr Ile Asp Ala Arg Asn
 225 230 235 240
 Pro His Ala Lys Asp Gln Leu Lys Tyr Leu Ile Val Tyr His Thr Lys
 245 250 255
 Leu Leu Asn Leu Ala Asp Arg Val Asn Arg Ser Phe Asn Phe Thr Phe
 260 265 270
 Leu Ile Ser Leu Ser Val Ser Met Ile Ser Asn Cys Phe Leu Ala Phe
 275 280 285
 Ser Met Thr Met Phe Asp Phe Gly Thr Ser Leu Lys His Leu Leu Gly
 290 295 300
 Leu Leu Leu Phe Ile Thr Tyr Asn Phe Ser Met Cys Arg Ser Gly Thr
 305 310 315 320
 His Leu Ile Leu Thr Ser Gly Lys Val Leu Pro Ala Ala Phe Tyr Asn
 325 330 335
 Asn Trp Tyr Glu Gly Asp Leu Val Tyr Arg Arg Met Leu Leu Ile Leu
 340 345 350
 Met Met Arg Ala Thr Lys Pro Tyr Met Trp Lys Thr Tyr Lys Leu Ala
 355 360 365
 Pro Val Ser Ile Thr Thr Tyr Met Ala Glu Cys Lys Thr Lys Glu Ala
 370 375 380
 His Glu Gln Arg His Phe Arg Arg His Glu Arg Gln Lys Pro Arg Val
 385 390 395 400
 Ala Arg Ile

<210> 93

<211> 858

<212> DNA

<213> Drosophila Melanogaster DOR84

<400> 93

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acctgctttc cgtcgccaag tgcaaaggtt caagaggaat atgctgtgaa gtcctggctg 240
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gccggtgacc taatgatctt cgctgtggtc ctgcagggtca tcatgcacta cgaaagactg 540
gccaagggtc ttagggagtt taagattcaa gcccataacg cacccaatgg agctaaggag 600
gatataagga agttgcagtc cctagtcgcc aatcacattg atatacttcg actcactgat 660
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gtctgcctgg tgggagttca attaaccatc gctttaagtc cagagtattt ttgcaagcag 780
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<210> 94
<211> 286
<212> PRT
<213> Drosophila Melanogaster DOR84

<400> 94

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Arg	Asp	Asn	Glu	Asn	Phe	Leu	Glu	Ser	Cys	Ile	Leu	Leu	Ser	Tyr	Val
		20						25					30		
Ser	Phe	Val	Val	Met	Gly	Leu	Ser	Lys	Ile	Gly	Ala	Val	Met	Lys	Lys
		35					40					45			
Lys	Pro	Lys	Met	Thr	Ala	Leu	Val	Arg	Gln	Leu	Glu	Thr	Cys	Phe	Pro
	50					55					60				
Ser	Pro	Ser	Ala	Lys	Val	Gln	Glu	Glu	Tyr	Ala	Val	Lys	Ser	Trp	Leu
65				70					75					80	
Lys	Arg	Cys	His	Ile	Tyr	Thr	Lys	Gly	Phe	Gly	Gly	Leu	Phe	Met	Ile
			85					90					95		
Met	Tyr	Phe	Ala	His	Ala	Leu	Ile	Pro	Leu	Phe	Ile	Tyr	Phe	Ile	Gln
			100				105						110		

Arg Val Leu Leu His Tyr Pro Asp Ala Lys Gln Ile Met Pro Phe Tyr
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 Gln Leu Glu Pro Trp Glu Phe Arg Asp Ser Trp Leu Phe Tyr Pro Ser
 130 135 140
 Tyr Phe His Gln Ser Ser Ala Gly Tyr Thr Ala Thr Cys Gly Ser Ile
 145 150 155 160
 Ala Gly Asp Leu Met Ile Phe Ala Val Val Leu Gln Val Ile Met His
 165 170 175
 Tyr Glu Arg Leu Ala Lys Val Leu Arg Glu Phe Lys Ile Gln Ala His
 180 185 190
 Asn Ala Pro Asn Gly Ala Lys Glu Asp Ile Arg Lys Leu Gln Ser Leu
 195 200 205
 Val Ala Asn His Ile Asp Ile Leu Arg Leu Thr Asp Leu Met Asn Glu
 210 215 220
 Val Phe Gly Ile Pro Leu Leu Leu Asn Phe Ile Ala Ser Ala Leu Leu
 225 230 235 240
 Val Cys Leu Val Gly Val Gln Leu Thr Ile Ala Leu Ser Pro Glu Tyr
 245 250 255
 Phe Cys Lys Gln Met Leu Phe Leu Ile Ser Val Leu Leu Glu Val Tyr
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<210> 95

<211> 1155

<212> DNA

<213> Drosophila Melanogaster DOR91

<400> 95

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 cgatatcttg acaaggttct agctgttgcg atgtccttg tttttatgca acacaacgat 180
 gcagagctga ggtacttgcg cttcgaggca agtaatcgga atttggatgc ctttctcaca 240
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 tcggccatgt acggtgcagt tatctctctg tatctaatac caccggtttt ttccatcatt 480

aaccaaagca aagattttct atactctatg atctttccgt tcgattcgga tcccttgtag 540
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<210> 96
<211> 385
<212> PRT
<213> *Drosophila Melanogaster* DOR91

<400> 96

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Ala	Trp	Pro	Leu	Ala	Val	Phe	Arg	Leu	Asn	His	Ile	Phe	Trp	Pro	Leu
			20					25					30		
Asp	Pro	Ser	Thr	Gly	Lys	Trp	Gly	Arg	Tyr	Leu	Asp	Lys	Val	Leu	Ala
		35					40					45			
Val	Ala	Met	Ser	Leu	Val	Phe	Met	Gln	His	Asn	Asp	Ala	Glu	Leu	Arg
	50					55					60				
Tyr	Leu	Arg	Phe	Glu	Ala	Ser	Asn	Arg	Asn	Leu	Asp	Ala	Phe	Leu	Thr
65				70						75				80	
Gly	Met	Pro	Thr	Tyr	Leu	Ile	Leu	Val	Glu	Ala	Gln	Phe	Arg	Ser	Leu
				85					90					95	
His	Ile	Leu	Leu	His	Phe	Glu	Lys	Leu	Gln	Lys	Phe	Leu	Glu	Ile	Phe
			100					105					110		
Tyr	Ala	Asn	Ile	Tyr	Ile	Asp	Pro	Arg	Lys	Glu	Pro	Glu	Met	Phe	Arg
		115					120					125			

Lys Val Asp Gly Lys Met Ile Ile Asn Arg Leu Val Ser Ala Met Tyr
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 Gly Ala Val Ile Ser Leu Tyr Leu Ile Ala Pro Val Phe Ser Ile Ile
 145 150 155 160
 Asn Gln Ser Lys Asp Phe Leu Tyr Ser Met Ile Phe Pro Phe Asp Ser
 165 170 175
 Asp Pro Leu Tyr Ile Phe Val Pro Leu Leu Leu Thr Asn Val Trp Val
 180 185 190
 Gly Ile Val Ile Asp Thr Met Met Phe Gly Glu Thr Asn Leu Leu Cys
 195 200 205
 Glu Leu Ile Val His Leu Asn Gly Ser Tyr Met Leu Leu Lys Arg Asp
 210 215 220
 Leu Gln Leu Ala Ile Glu Lys Ile Leu Val Ala Arg Asp Arg Pro His
 225 230 235 240
 Met Ala Lys Gln Leu Lys Val Leu Ile Thr Lys Thr Leu Arg Lys Asn
 245 250 255
 Val Ala Leu Asn Gln Phe Gly Gln Gln Leu Glu Ala Gln Tyr Thr Val
 260 265 270
 Arg Val Phe Ile Met Phe Ala Phe Ala Ala Gly Leu Leu Cys Ala Leu
 275 280 285
 Ser Phe Lys Ala Tyr Thr Thr Asp Ser Leu Ser Thr Met Tyr Tyr Leu
 290 295 300
 Thr His Trp Glu Gln Ile Leu Gln Tyr Ser Thr Asn Pro Ser Glu Asn
 305 310 315 320
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 325 330 335
 Pro Phe Tyr Val Thr Gly Leu Lys Tyr Phe Arg Val Ser Leu Gln Ala
 340 345 350
 Gly Leu Lys Arg Gln Lys Phe Leu Arg Ser Ala Ser Ser Ser Thr Leu
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Leu
 385

<210> 97
 <211> 1218
 <212> DNA

<213> Drosophila Melanogaster DOR92

<400> 97

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gagcagcggg acatccggct aaagcactcg gccatggcgg ctgcgcatcaa tttctggccc      420
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gccgctttga gccaaactgt ggtttattgc tatggcggaa ctctggtggc cgaaagtagc     1020
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cgactcgttc agcttttgat tctcagatcg cagcgtcctg tttccatggc agtgccattc     1140
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<210> 98

<211> 406

<212> PRT

<213> Drosophila Melanogaster DOR92

<400> 98

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 20 25 30
 Pro Gly Lys Thr Gly Asp Thr Trp Pro Trp Arg Ser Leu Ile His Phe
 35 40 45
 Ala Ile Leu Ala Ile Gly Val Ala Thr Glu Leu His Ala Gly Met Cys
 50 55 60
 Phe Leu Asp Arg Gln Gln Ile Thr Leu Ala Leu Glu Thr Leu Cys Pro
 65 70 75 80
 Ala Gly Thr Ser Ala Val Thr Leu Leu Lys Met Phe Leu Met Leu Arg
 85 90 95
 Phe Arg Gln Asp Leu Ser Ile Met Trp Asn Arg Leu Arg Gly Leu Leu
 100 105 110
 Phe Asp Pro Asn Trp Glu Arg Pro Glu Gln Arg Asp Ile Arg Leu Lys
 115 120 125
 His Ser Ala Met Ala Ala Arg Ile Asn Phe Trp Pro Leu Ser Ala Gly
 130 135 140
 Phe Phe Thr Cys Thr Thr Tyr Asn Leu Lys Pro Ile Leu Ile Ala Met
 145 150 155 160
 Ile Leu Tyr Leu Gln Asn Arg Tyr Glu Asp Phe Val Trp Phe Thr Pro
 165 170 175
 Phe Asn Met Thr Met Pro Lys Val Leu Leu Asn Tyr Pro Phe Phe Pro
 180 185 190
 Leu Thr Tyr Ile Phe Ile Ala Tyr Thr Gly Tyr Val Thr Ile Phe Met
 195 200 205
 Phe Gly Gly Cys Asp Gly Phe Tyr Phe Glu Phe Cys Ala His Leu Ser
 210 215 220
 Ala Leu Phe Glu Val Leu Gln Ala Glu Ile Glu Ser Met Phe Arg Pro
 225 230 235 240
 Tyr Thr Asp His Leu Glu Leu Ser Pro Val Gln Leu Tyr Ile Leu Glu
 245 250 255
 Gln Lys Met Arg Ser Val Ile Ile Arg His Asn Ala Ile Ile Asp Leu
 260 265 270
 Thr Arg Phe Phe Arg Asp Arg Tyr Thr Ile Ile Thr Leu Ala His Phe
 275 280 285
 Val Ser Ala Ala Met Val Ile Gly Phe Ser Met Val Asn Leu Leu Thr
 290 295 300

Leu Gly Asn Asn Gly Leu Gly Ala Met Leu Tyr Val Ala Tyr Thr Val
 305 310 315 320
 Ala Ala Leu Ser Gln Leu Leu Val Tyr Cys Tyr Gly Gly Thr Leu Val
 325 330 335
 Ala Glu Ser Ser Thr Gly Leu Cys Arg Ala Met Phe Ser Cys Pro Trp
 340 345 350
 Gln Leu Phe Lys Pro Lys Gln Arg Arg Leu Val Gln Leu Leu Ile Leu
 355 360 365
 Arg Ser Gln Arg Pro Val Ser Met Ala Val Pro Phe Phe Ser Pro Ser
 370 375 380
 Leu Ala Thr Phe Ala Ala Ile Leu Gln Thr Ser Gly Ser Ile Ile Ala
 385 390 395 400
 Leu Val Lys Ser Phe Gln
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<210> 99
 <211> 1176
 <212> DNA
 <213> Drosophila Melanogaster DOR95

<400> 99
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 ccgtgggtga cctttgtcac aatgggacca cttttcctgt ttatgggtgcc catgttcctg 180
 gccgcccacg agtacatcac ccagggtgagc ctgctctccg acaccctggg ctccaccttc 240
 gccagcatgc tcaccctggt caaattcctg ctcttctgct atcatcgcaa ggagtctgtc 300
 ggctgatct accacatcag ggccattctg gctaaagaaa tcgaagtgtg gcctgatgag 360
 cgggaaatca tcgagggtga gaaccaaagt gaccaaagtc tcagtcttac gtacactcgc 420
 tgttttgagc tggtggaat ctttgcgccc ctgaagccct ttgtgggcat catactctcc 480
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 ctccagggtg tcatgtttta tgtgcccacc tatctgtgga atgtgatggc cagctatagt 600
 gctgtaacca tggcactctg cgtggactcg ctgctcttct ttttcaccta caacgtgtgc 660
 gccattttca agatcgccaa gcaccggatg atccatctgc cggcgggtgg cggaaggag 720
 gagctggagg ggctcgtcca ggtgctgctg ctgcaccaga agggcctcca gatcgccgat 780
 cacattgcgg acaagtaccg gccgctgacg tttttgcagt tctttctgtc cgccttgag 840

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<210> 100
 <211> 392
 <212> PRT
 <213> Drosophila Melanogaster DOR95

<400> 100

Met	Ser	Asp	Lys	Val	Lys	Gly	Lys	Lys	Gln	Glu	Glu	Lys	Asp	Gln	Ser	1	5	10	15
Leu	Arg	Val	Gln	Ile	Leu	Val	Tyr	Arg	Cys	Met	Gly	Ile	Asp	Leu	Trp	20	25	30	
Ser	Pro	Thr	Met	Ala	Asn	Asp	Arg	Pro	Trp	Leu	Thr	Phe	Val	Thr	Met	35	40	45	
Gly	Pro	Leu	Phe	Leu	Phe	Met	Val	Pro	Met	Phe	Leu	Ala	Ala	His	Glu	50	55	60	
Tyr	Ile	Thr	Gln	Val	Ser	Leu	Leu	Ser	Asp	Thr	Leu	Gly	Ser	Thr	Phe	65	70	75	80
Ala	Ser	Met	Leu	Thr	Leu	Val	Lys	Phe	Leu	Leu	Phe	Cys	Tyr	His	Arg	85	90	95	
Lys	Glu	Phe	Val	Gly	Leu	Ile	Tyr	His	Ile	Arg	Ala	Ile	Leu	Ala	Lys	100	105	110	
Glu	Ile	Glu	Val	Trp	Pro	Asp	Ala	Arg	Glu	Ile	Ile	Glu	Val	Glu	Asn	115	120	125	
Gln	Ser	Asp	Gln	Met	Leu	Ser	Leu	Thr	Tyr	Thr	Arg	Cys	Phe	Gly	Leu	130	135	140	
Ala	Gly	Ile	Phe	Ala	Ala	Leu	Lys	Pro	Phe	Val	Gly	Ile	Ile	Leu	Ser	145	150	155	160
Ser	Ile	Arg	Gly	Asp	Glu	Ile	His	Leu	Glu	Leu	Pro	His	Asn	Gly	Val	165	170	175	
Tyr	Pro	Tyr	Asp	Leu	Gln	Val	Val	Met	Phe	Tyr	Val	Pro	Thr	Tyr	Leu	180	185	190	

Trp Asn Val Met Ala Ser Tyr Ser Ala Val Thr Met Ala Leu Cys Val
 195 200 205
 Asp Ser Leu Leu Phe Phe Phe Thr Tyr Asn Val Cys Ala Ile Phe Lys
 210 215 220
 Ile Ala Lys His Arg Met Ile His Leu Pro Ala Val Gly Gly Lys Glu
 225 230 235 240
 Glu Leu Glu Gly Leu Val Gln Val Leu Leu Leu His Gln Lys Gly Leu
 245 250 255
 Gln Ile Ala Asp His Ile Ala Asp Lys Tyr Arg Pro Leu Ile Phe Leu
 260 265 270
 Gln Phe Phe Leu Ser Ala Leu Gln Ile Cys Phe Ile Gly Phe Gln Val
 275 280 285
 Ala Asp Leu Phe Pro Asn Pro Gln Ser Leu Tyr Phe Ile Ala Phe Val
 290 295 300
 Gly Ser Leu Leu Ile Ala Leu Phe Ile Tyr Ser Lys Cys Gly Glu Asn
 305 310 315 320
 Ile Lys Ser Ala Ser Leu Asp Phe Gly Asn Gly Leu Tyr Glu Thr Asn
 325 330 335
 Trp Thr Asp Phe Ser Pro Pro Thr Lys Arg Ala Leu Leu Ile Ala Ala
 340 345 350
 Met Arg Ala Gln Arg Pro Cys Gln Met Lys Gly Tyr Phe Phe Glu Ala
 355 360 365
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 Met Met Leu Arg Ser Phe Asn Ala
 385 390

<210> 101
 <211> 1170

<212> DNA

<213> Drosophila Melanogaster DOR99

<400> 101
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 tcggcggtttc ttaatgtcct gtttttcggc tgcaatggtt gggacatcat aggacatttt 180
 tggctgggac atcctgccaa ccagaatccg cccgtgctta gcatacccat ttacttctcg 240
 atcaggggat tgatgctata cctgaaacga aaggaaatcg ttgagtttgt taacgacttg 300

gatcgggagt gtccgcggga cttggtcagc cagttggaca tgcaaatgga tgagacgtac 360
cgaaactttt ggcagcgcta tcgcttcac cgtatctact cccatttggg tggtcgatg 420
ttctgcgttg tgccattagc tctattcctc ctgaccacg agggtaaaga tactcctggt 480
gcccagcacg agcagctcct tggaggatgg ctgccatgcg gtgtgcgaaa ggacccaaat 540
ttctaccttt tagtctggtc cttcgacctg atgtgcacca cttgcggcgt ctcctttttc 600
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<210> 102

<211> 390

<212> PRT

<213> Drosophila Melanogaster DOR99

<400> 102

Met Glu Glu Phe Leu Arg Pro Gln Met Phe Gln Glu Val Ala Gln Met
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Val His Phe Gln Trp Arg Arg Asn Pro Val Asp Asn Ser Met Val Asn
20 25 30

Ala Ser Met Val Pro Phe Cys Leu Ser Ala Phe Leu Asn Val Leu Phe
35 40 45

Phe Gly Cys Asn Gly Trp Asp Ile Ile Gly His Phe Trp Leu Gly His
50 55 60

Pro Ala Asn Gln Asn Pro Pro Val Leu Ser Ile Thr Ile Tyr Phe Ser
65 70 75 80

Ile Arg Gly Leu Met Leu Tyr Leu Lys Arg Lys Glu Ile Val Glu Phe

Thr Phe Leu Lys Ser His
385 390

<210> 103
<211> 1917
<212> DNA
<213> Drosophila Melanogaster DORA45

<400> 103
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gtaccagaca acaattacat ttgtattttt aaagttcaat agcaaggatg acaacctcga 180
tgcagccgag caagtacacg ggcttggctg ccgacctgat gcccaacatc cgggcgatga 240
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cccactgcat cacgaagttt atctacctgg ctgttaacca gaagaatttc tacagaacat 480
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accatgagac gaactccagc atccgggtgg agataccccg gctgcccatt aagtccttct 720
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acaagcacgt ggtgcgactg gtggtgccca tcggcgatac ttacggagcc gccctcctcc 1260
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 tcaagtaagt tgctgcgaag ctgatggatt tttgtaccag aaaagcgaat gccaagaagc 1680
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 acgcaaatta tatattttat acctgcgacg agcgagcctc gtggggcata atggagacat 1800
 tctggggcac atagaagcct gcaaatactt atcgattttg tacacgcgta gagcttttaa 1860
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<210> 104
 <211> 486
 <212> PRT
 <213> Drosophila Melanogaster DORA45

<400> 104

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			20					25					30		
Asn	Phe	Thr	Gly	Gly	Ser	Ala	Phe	Met	Lys	Lys	Val	Tyr	Ser	Ser	Val
			35				40					45			
His	Leu	Val	Phe	Leu	Leu	Met	Gln	Phe	Thr	Phe	Ile	Leu	Val	Asn	Met
	50					55					60				
Ala	Leu	Asn	Ala	Glu	Glu	Val	Asn	Glu	Leu	Ser	Gly	Asn	Thr	Ile	Thr
65				70					75					80	
Thr	Leu	Phe	Phe	Thr	His	Cys	Ile	Thr	Lys	Phe	Ile	Tyr	Leu	Ala	Val
				85					90					95	
Asn	Gln	Lys	Asn	Phe	Tyr	Arg	Thr	Leu	Asn	Ile	Trp	Asn	Gln	Val	Asn
			100					105					110		
Thr	His	Pro	Leu	Phe	Ala	Glu	Ser	Asp	Ala	Arg	Tyr	His	Ser	Ile	Ala
		115					120					125			
Leu	Ala	Lys	Met	Arg	Lys	Leu	Phe	Phe	Leu	Val	Met	Leu	Thr	Thr	Val
	130					135					140				
Ala	Ser	Ala	Thr	Ala	Trp	Thr	Thr	Ile	Thr	Phe	Phe	Gly	Asp	Ser	Val

145		150		155		160
Lys Met Val Val Asp His Glu Thr Asn Ser Ser Ile Pro Val Glu Ile						
		165		170		175
Pro Arg Leu Pro Ile Lys Ser Phe Tyr Pro Trp Asn Ala Ser His Gly						
		180		185		190
Met Phe Tyr Met Ile Ser Phe Ala Phe Gln Ile Tyr Tyr Val Leu Phe						
		195		200		205
Ser Met Ile His Ser Asn Leu Cys Asp Val Met Phe Cys Ser Trp Leu						
		210		215		220
Ile Phe Ala Cys Glu Gln Leu Gln His Leu Lys Gly Ile Met Lys Pro						
		225		230		235
Leu Met Glu Leu Ser Ala Ser Leu Asp Thr Tyr Arg Pro Asn Ser Ala						
		245		250		255
Ala Leu Phe Arg Ser Leu Ser Ala Asn Ser Lys Ser Glu Leu Ile His						
		260		265		270
Asn Glu Glu Lys Asp Pro Gly Thr Asp Met Asp Met Ser Gly Ile Tyr						
		275		280		285
Ser Ser Lys Ala Asp Trp Gly Ala Gln Phe Arg Ala Pro Ser Thr Leu						
		290		295		300
Gln Ser Phe Gly Gly Asn Gly Gly Gly Gly Asn Gly Leu Val Asn Gly						
		305		310		315
Ala Asn Pro Asn Gly Leu Thr Lys Lys Gln Glu Met Met Val Arg Ser						
		325		330		335
Ala Ile Lys Tyr Trp Val Glu Arg His Lys His Val Val Arg Leu Val						
		340		345		350
Ala Ala Ile Gly Asp Thr Tyr Gly Ala Ala Leu Leu Leu His Met Leu						
		355		360		365
Thr Ser Thr Ile Lys Leu Thr Leu Leu Ala Tyr Gln Ala Thr Lys Ile						
		370		375		380
Asn Gly Val Asn Val Tyr Ala Phe Thr Val Val Gly Tyr Leu Gly Tyr						
		385		390		395
Ala Leu Ala Gln Val Phe His Phe Cys Ile Phe Gly Asn Arg Leu Ile						
		405		410		415
Glu Glu Ser Ser Ser Val Met Glu Ala Ala Tyr Ser Cys His Trp Tyr						
		420		425		430
Asp Gly Ser Glu Glu Ala Lys Thr Phe Val Gln Ile Val Cys Gln Gln						
		435		440		445

Cys Gln Lys Ala Met Ser Ile Ser Gly Ala Lys Phe Phe Thr Val Ser
 450 455 460

Leu Asp Leu Phe Ala Ser Val Leu Gly Ala Val Val Thr Tyr Phe Met
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Val Leu Val Gln Leu Lys
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<210> 105
 <211> 1317
 <212> DNA
 <213> Drosophila melanogaster DOR44

<400> 105
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 ggatctggag tcctggccgt tctgggtcga ttctgtgact tgacctacga gctctttaac 180
 tacttcgttt cggtaacat agctggcctg tacatctgca ccattctacat caactatggg 240
 caaggcgatt tggacttctt cgtgaactgt ttgatacaaa ccattattta tctgtggaca 300
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 aacatcaatg atgagtacga gacacgttcg gctgtgggat tcagtttcgt cacaatggcg 420
 ggatcctatc ggatgtccaa gctatggatc aaaacctatg tgtattgctg ctacataggc 480
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 tggtatccct ttgactatac acaaccgggt gtctatgagg tagtgcttct tctccaggcg 600
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 ttcgtctcca cgaagagcac cgcggccaac tcattcatgc gaatggctct cttggggccag 1080
 tacctgctct tagttctcta cgagctgttc atcatctgct acttcgcgga catcggtttt 1140
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gatgttcgca gtgattacat gttctttatg ctgaattccc gcaggcagtt ccaacttacg 1260
gccggaaaaa taagcaatct aaacgtggat cgtttcagag ggggtgggtat ccttact 1317

<210> 106
<211> 439
<212> PRT
<213> Drosophila melanogaster DOR44

<400> 106

Met	Lys	Ser	Thr	Phe	Lys	Glu	Glu	Arg	Ile	Lys	Asp	Asp	Ser	Lys	Arg
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Arg	Asp	Leu	Phe	Val	Phe	Val	Arg	Gln	Thr	Met	Cys	Ile	Ala	Ala	Met
		20						25					30		
Tyr	Pro	Phe	Gly	Tyr	Tyr	Val	Asn	Gly	Ser	Gly	Val	Leu	Ala	Val	Leu
		35					40					45			
Val	Arg	Phe	Cys	Asp	Leu	Thr	Tyr	Glu	Leu	Phe	Asn	Tyr	Phe	Val	Ser
	50					55					60				
Val	His	Ile	Ala	Gly	Leu	Tyr	Ile	Cys	Thr	Ile	Tyr	Ile	Asn	Tyr	Gly
65					70					75					80
Gln	Gly	Asp	Leu	Asp	Phe	Phe	Val	Asn	Cys	Leu	Ile	Gln	Thr	Ile	Ile
			85						90					95	
Tyr	Leu	Trp	Thr	Ile	Ala	Met	Lys	Leu	Tyr	Phe	Arg	Arg	Phe	Arg	Pro
			100					105						110	
Gly	Leu	Leu	Asn	Thr	Ile	Leu	Ser	Asn	Ile	Asn	Asp	Glu	Tyr	Glu	Thr
		115					120					125			
Arg	Ser	Ala	Val	Gly	Phe	Ser	Phe	Val	Thr	Met	Ala	Gly	Ser	Tyr	Arg
		130				135						140			
Met	Ser	Lys	Leu	Trp	Ile	Lys	Thr	Tyr	Val	Tyr	Cys	Cys	Tyr	Ile	Gly
145					150					155					160
Thr	Ile	Phe	Trp	Leu	Ala	Leu	Pro	Ile	Ala	Tyr	Arg	Asp	Arg	Ser	Leu
			165					170						175	
Pro	Leu	Ala	Cys	Trp	Tyr	Pro	Phe	Asp	Tyr	Thr	Gln	Pro	Gly	Val	Tyr
			180					185					190		
Glu	Val	Val	Phe	Leu	Leu	Gln	Ala	Met	Gly	Gln	Ile	Gln	Val	Ala	Ala
		195					200					205			
Ser	Phe	Ala	Ser	Ser	Ser	Gly	Leu	His	Met	Val	Leu	Cys	Val	Leu	Ile
	210					215					220				

Ser Gly Gln Tyr Asp Val Leu Phe Cys Ser Leu Lys Asn Val Leu Ala
 225 230 235 240
 Ser Ser Tyr Val Leu Met Gly Ala Asn Met Thr Glu Leu Asn Gln Leu
 245 250 255
 Gln Ala Glu Gln Ser Ala Ala Asp Val Glu Pro Gly Gln Tyr Ala Tyr
 260 265 270
 Ser Val Glu Glu Glu Thr Pro Leu Gln Glu Leu Leu Lys Val Gly Ser
 275 280 285
 Ser Met Asp Phe Ser Ser Ala Phe Arg Leu Ser Phe Val Arg Cys Ile
 290 295 300
 Gln His His Arg Tyr Ile Val Ala Ala Leu Lys Lys Ile Glu Ser Phe
 305 310 315 320
 Tyr Ser Pro Ile Trp Phe Val Lys Ile Gly Glu Val Thr Phe Leu Met
 325 330 335
 Cys Leu Val Ala Phe Val Ser Thr Lys Ser Thr Ala Ala Asn Ser Phe
 340 345 350
 Met Arg Met Val Ser Leu Gly Gln Tyr Leu Leu Leu Val Leu Tyr Glu
 355 360 365
 Leu Phe Ile Ile Cys Tyr Phe Ala Asp Ile Val Phe Gln Asn Ser Gln
 370 375 380
 Arg Cys Gly Glu Ala Leu Trp Arg Ser Pro Trp Gln Arg His Leu Lys
 385 390 395 400
 Asp Val Arg Ser Asp Tyr Met Phe Phe Met Leu Asn Ser Arg Arg Gln
 405 410 415
 Phe Gln Leu Thr Ala Gly Lys Ile Ser Asn Leu Asn Val Asp Arg Phe
 420 425 430
 Arg Gly Val Gly Ile Leu Thr
 435
 <210> 107
 <211> 363
 <212> PRT
 <213> DROSOPHILA MELANOGASTER DOR61
 <400> 107
 Met Gly His Lys Asp Asp Met Asp Ser Thr Asp Ser Thr Ala Leu Ser
 1 5 10 15
 Leu Lys His Ile Ser Ser Leu Ile Phe Val Ile Ser Ala Gln Tyr Pro
 20 25 30

Leu Ile Ser Tyr Val Ala Tyr Asn Arg Asn Asp Met Glu Lys Val Thr
 35 40 45
 Ala Cys Leu Ser Val Val Phe Thr Asn Met Leu Thr Val Ile Lys Ile
 50 55 60
 Ser Thr Phe Leu Ala Asn Arg Lys Asp Phe Trp Glu Met Ile His Arg
 65 70 75 80
 Phe Arg Lys Met His Glu Gln Cys Lys Tyr Arg Glu Gly Leu Asp Tyr
 85 90 95
 Val Ala Glu Ala Asn Lys Leu Ala Ser Phe Leu Gly Arg Ala Tyr Cys
 100 105 110
 Val Ser Cys Gly Leu Thr Gly Leu Tyr Phe Met Leu Gly Pro Ile Val
 115 120 125
 Lys Ile Gly Val Cys Arg Trp His Gly Thr Thr Cys Asp Lys Glu Leu
 130 135 140
 Pro Met Pro Met Lys Phe Pro Phe Asn Asp Leu Glu Ser Pro Gly Tyr
 145 150 155 160
 Glu Val Cys Phe Leu Tyr Thr Val Leu Val Thr Val Val Val Val Ala
 165 170 175
 Tyr Ala Ser Ala Val Asp Gly Leu Phe Ile Ser Phe Ala Ile Asn Leu
 180 185 190
 Arg Ala His Phe Gln Thr Leu Gln Arg Gln Ile Glu Asn Trp Glu Phe
 195 200 205
 Pro Ser Ser Glu Pro Asp Thr Gln Ile Arg Leu Lys Ser Ile Val Glu
 210 215 220
 Tyr His Val Leu Leu Leu Ser Leu Ser Arg Lys Leu Arg Ser Ile Tyr
 225 230 235 240
 Thr Pro Thr Val Met Gly Gln Phe Val Ile Thr Ser Leu Gln Val Gly
 245 250 255
 Val Ile Ile Tyr Gln Leu Val Thr Asn Met Asp Ser Val Met Asp Leu
 260 265 270
 Leu Leu Tyr Ala Ser Phe Phe Gly Ser Ile Met Leu Gln Leu Phe Ile
 275 280 285
 Tyr Cys Tyr Gly Gly Glu Ile Ile Lys Ala Glu Ser Leu Gln Val Asp
 290 295 300
 Thr Ala Val Arg Leu Ser Asn Trp His Leu Ala Ser Pro Lys Thr Arg
 305 310 315 320
 Thr Ser Leu Ser Leu Ile Ile Leu Gln Ser Gln Lys Glu Val Leu Ile

145	150	155	160
Asn Trp Arg Asp Ser Thr Ser Ala Tyr Leu Ala Thr Ala Met Leu His	165	170	175
Thr Thr Ala Leu Met Ala Asn Ala Thr Leu Val Leu Asn Leu Ser Ser	180	185	190
Tyr Pro Gly Thr Tyr Leu Ile Leu Val Ser Val His Thr Lys Ala Leu	195	200	205
Ala Leu Arg Val Ser Lys Leu Gly Tyr Gly Ala Pro Leu Pro Ala Val	210	215	220
Arg Met Gln Ala Ile Leu Val Gly Tyr Ile His Asp His Gln Ile Ile	225	230	235
Leu Arg Xaa Val Ser Gly Asn Leu Ile Ser Gln Cys Lys Asn Phe Xaa	245	250	255
Ser Ile Ser Gly Val Leu Thr Phe Ile Glu Arg Arg Met Tyr Thr His	260	265	270
Phe Gly Val Pro Asn Ile Phe Ile Val Ile Glu Asp Tyr Tyr Ile Leu	275	280	285
Phe Leu Asn Tyr Ser Leu Phe Lys Ser Leu Glu Arg Ser Leu Ser Met	290	295	300
Thr Cys Phe Leu Gln Phe Phe Ser Thr Ala Cys Ala Gln Cys Thr Ile	305	310	315
Cys Tyr Phe Leu Leu Phe Gly Asn Val Gly Ile Met Arg Phe Met Asn	325	330	335
Met Leu Phe Leu Leu Val Ile Leu Thr Thr Glu Thr Leu Leu Leu Cys	340	345	350
Tyr Thr Ala Glu Leu Pro Cys Lys Glu Gly Glu Ser Leu Leu Thr Ala	355	360	365
Val Tyr Ser Cys Asn Trp Leu Ser Gln Ser Val Asn Phe Arg Arg Leu	370	375	380
Leu Leu Leu Met Leu Ala Arg Cys Gln Ile Pro Met Ile Leu Val Ser	385	390	395
Gly Val Ile Val Pro Ile Ser Met Lys Thr Phe	405	410	